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SECOND INTERNATIONAL

CONGRESS OF ORIENTALISTS.

TRANSACTIONS

OF THE

SECOND SESSION

OF THE

INTERNATIONAL

CONGRESS OF ORIENTALISTS.

Held in London in September, 1874.

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EDITED BY

ROBERT K. DOUGLAS,

Honorary Secretary.

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PREFACE.

THE delay which has occurred in the appearance of the present volume has been due to several causes, and principally to the difficulty of collecting the Oriental types required for the work. Some it has been necessary to gather from various and friendly sources, and others, being beyond the capabilities of English founts, it has been necessary to cut. Then, again, the Congress has been compelled to pay the penalty of the cosmopolitan character of its Session. To it came Oriental scholars from all parts of Europe, Asia, Africa, and America, many of whom gave us the valuable results of their studies and learning; and to such, in the majority of cases, it was found necessary to forward proofs of their dissertations. Under these circumstances it will be readily understood by those to whose lot it has fallen to see through the press works of a similar kind with the present, how rapidly days, weeks, and even months have slipped away, and that the sixteen months which have elapsed since the materials were first put into my hands for publication is no unprecedented interval.

I am fully aware that much anxiety and some im-

patience has been expressed at the delay which has thus arisen. Indeed, one French Member, past the prime of life, so far despaired of seeing the following pages with mortal eyes that, when lately asked if he had left his address with the Editor that his copy might be sent him, he answered, "*Oui, mais pas pour l'autre monde.*" It is at least a satisfaction to me to know that this omission was immaterial, and that before many days are over the publishers will have forwarded to him, as well as to every other Member of the Congress, a copy of these "Transactions."

ROBERT K. DOUGLAS.

May 3rd, 1876.

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INAUGURAL ADDRESS,

DELIVERED ON MONDAY, SEPTEMBER 14TH, 1874,

AT THE

ROYAL INSTITUTION,

BY

SAMUEL BIRCH, ESQ., LL.D., PRESIDENT.

THIS second meeting of the International Congress of Orientalists is an event of more than ordinary importance in the annals of Oriental studies. The fortunate idea of bringing together these students of congenial pursuits to interchange thoughts, to discuss points of common interest, and to make each other's acquaintance, is due to the exertions of M. de Rosny, who, I am happy to say, has given us the favour of his company to-day. It was founded in Paris in 1873. The warm interest ever shown by France in Oriental studies, and the high distinction long ago attained by the celebrated men of that country, most of whom have unfortunately passed away from us, but whose labours adorned the country to which they belonged, made Paris a most appropriate site for such a Congress. At the close of that Congress—September 6, 1873—the vote of those present determined, notwithstanding brilliant offers and pressing invitations from other countries, that this second Congress should be held in England, and in this great city, distinguished for its extent as well as for its devotion to the study of the East, and connected with that East by a thousand ties, the interests of commerce, the spread of civilization, missionary labours, and the duties of governing Oriental Dependencies

of various tongues and sites in that East which is to-day the object of our meeting and the subject of our thoughts. In order that the Congress of Paris might have a successor, it was necessary to elect a President in this country, and the nomination fell upon myself. In undertaking the duties of such an office, I was well aware of the difficulties involved in the task. A President, gentlemen, at the present day is not merely a name or a sinecure, he is a reality, an administrator; and, however ably seconded by his secretaries and his committee, he has yet a great deal of detail to manage and many arrangements to effect. In the presence of so many who are more versed in the duties of affairs than myself, there is but one thing to ask you, and that is your cordial co-operation with one who accepted the office under the feeling of his own deficiencies for the task, and of the necessity that some one should promptly step forward to continue the work which had been begun, and which promises to be of such great advantage to Orientalists.

Our first duty is to announce the favour with which the movement has been received by the different States and Sovereignties of Europe, delegates from whom are present here to-day. Besides those gentlemen who appear as representatives of the different powers of the North and West, others have come from the far East to add by their presence, by the information they bring and the objects they display, to the pleasure it will afford us to make their acquaintance. Here, gentlemen, I must tell you that the application made to the Secretary of State for India was received in the most kind and prompt manner, and that the Hindoo *savants* designated as likely to contribute by their presence to the success of the Aryan Section were at once consulted by the Indian Government, who offered to send them to Europe to be present to-day at our first meeting. If from various causes they are not here, India is not without its representatives. An eminent Civil Servant of the Indian Government is here from the Presidency of Bombay, and will, I am sure, carry back with him to that Presidency the remembrance of the warm reception which you will accord him. There has been every desire on the part of the India Office to do all that has either been asked or lies in its power on behalf of the Congress, and you will see on the occasion of your visit to that Office that an admirable museum and an extensive library show that the Office is not indifferent to Oriental learning and studies.

The advance of civilization is marked by the increased attention paid to the pursuits in which we are engaged. The spread of knowledge has not only rendered that popular which was at one time reserved for a narrow circle, but has elevated these studies in public estimation. In this country the bond which holds us to our Asiatic Empire, the links that connect our commerce with all the nations of the East, have rendered the intimate acquaintance with the languages, thoughts, history, and monuments of these nations not a luxury, but a necessity. Probably persons could be found in so large a city, if required, who could speak any dialect under the sun or read any writing upon the planet. To whatever branch of Oriental learning any of those who have honoured the Congress with their presence today is attached, he will be sure to find some congenial mind to take a warm interest in his pursuits, interchange thoughts with him, or aid in the solution of his difficulties; nay, the pursuit of these studies is a kind of touch of nature—it makes us all akin, just as in the study itself everything that is individual disappears from the mind, except the pursuit itself. Orientalists, too, are all, so to say, men born of the same family, and, like a family, mutually interested in the success of their respective studies. Before that, as students, all the distinctions of race, creed, and nationality disappear or are forgotten. Even criticism ought neither to be nor become personal, inasmuch as Science places for its object the highest scope of the mind—truth, which is in most cases difficult to find, and no reproach to miss.

The nineteenth century has seen the revival of Oriental learning, and the great discoveries made throughout the East, in Mesopotamia, Egypt, India, and Persia, have thrown an entirely new light on the ancient monarchies, religions and languages of the Eastern world as it existed forty centuries ago. This has been due to several causes, chiefly to the improved facilities of access, by which travellers and others have visited these countries and their monuments, and have excavated their remains, and partly to the advance made in Europe itself, which has enabled the monuments discovered to be more accurately copied. The extensive excavations made throughout the East and the continuous explorations of modern travellers have left no accessible monument uncopied; and the quantity of the material now placed at the disposal of the student is consequently immense. With the increased number of texts of the old East has come the

more accurate knowledge, based on the power of comparison now given to the student. These materials were unknown to inquirers of the previous century. Empires have been exhumed, and for the first time a contemporary history of recorded events has been found. In Egypt the more recent excavations of M. Mariette have added considerably to the knowledge of history and geography, by the discovery of the numerous names on the Pylon of Karnak, recording the foreign conquests of Thothmes III. These, in a paper lately read before the Academy of Inscriptions, enabled him to attempt a more accurate classification of the Egyptian names of countries. In Mesopotamia the missions of Mr. G. Smith and his excavations amidst the mounds of Kouyunjik have added extensively to the completion of Assyrian texts, elucidating the history and religion of that people; while in India the labours of General Cunningham promise to bring to light and classify the different monuments and antiquities which he explores and records. The first discoveries of these ancient languages, it will be remembered, were due to the unearthing of important monuments, and it appears almost a subject for the consideration of the Congress to recommend that every reasonable facility should be accorded in the East to excavations undertaken purely from a scientific point of view; for those branches of excavations which follow up the hints afforded by monumental information require continually this discovery of fresh materials to stimulate the student, and without them the study languishes. It will also be remembered that the oldest languages are found almost exclusively on monuments, and that with the exception of Egypt, all the ancient records, which were of fragile and perishable materials, have been lost or destroyed. Continuous excavation is therefore requisite to obtain fresh material; for, as already remarked, without fresh material these studies languish, and the interest in their pursuit diminishes. It is not possible here to enter into details of all the most important of the monuments, and their contribution to the advance of Oriental knowledge; but there are two of supreme importance, discovered in times comparatively recent, which rise to the mind at once—the tablet of Canopus, found by Professor Lepsius amid the ruins of San, the ancient Tanis, and the bilingual inscription of Dali obtained by Mr. R. H. Lang in the ruins of Idalium in Cyprus. The tablet of Canopus has proved beyond a doubt, if such still lingered, the truth of the discovery of

the Egyptian language and the decipherment of the hieroglyphs; the inscription of Dali has led to the decipherment and interpretation of the ancient Cyprian language, about which erroneous notions had hitherto prevailed, but which has now been discovered to belong to the Aryan family and to the Hellenic group of that section of languages. These indeed are only the most striking examples of the philological value of newly-discovered inscriptions; but those from Mesopotamia and Egypt are scarcely less remarkable for their contributions to the historical knowledge of those ancient empires; while the celebrated Moabite stone or inscription of Dhiban has presented a new page to the history of the Semitic people conterminous with Judea, and is one of the oldest texts in character of the Phœnician alphabet and its different classes. It is a most valuable document of the Palæography of the Semitic family emancipated from the cumbrous and perplexing syllabaries of the various kinds of cuneiform writing.

From the importance of the Congress's encouraging, by its sympathies, further excavations, I turn to another point which might engage its attention, and that is the transliteration of Oriental texts into European characters. Great progress in this direction has been made of late years, and many schemes have been proposed. In some instances, the learned societies and scientific journals have insisted on the adoption of particular systems for papers admitted into their pages. There are many members present of all the Oriental Societies and Academies of Europe, and it will be for them to consider if some mutual agreement can be arrived at on this subject; and for most Oriental languages a decision favourable to one universal transliteration would be of the highest importance, as it would in many instances supersede the necessity of printing in various characters and different Oriental types, an expensive and difficult process. It would not, indeed, effect this for languages written with syllabic characters, but for those only which have an alphabetic one, and the same mode of transliteration would be an invaluable aid to the simplification and rendering of words in these languages, and making them universally intelligible. This subject will be no doubt submitted to the consideration of one of the Sections of the Congress. It is, indeed, one of the subjects which it would be the especial object of the Congress to regulate, or at all events to initiate. That

some such necessity exists and is felt is proved by the constant changes made by individuals in their transliteration of the words of Oriental tongues, whether living or extinct; the older systems already adopted not answering to their special notions of the manner in which these languages should be transliterated. Should the Congress be able to pronounce any opinion on this difficult subject, that opinion would no doubt carry with it great weight, even should it not finally decide the question, and lead to a further consideration of this pressing want of Philological unity.

It is not, perhaps, necessary for the Congress to consider how far it would be desirable to discuss the question of an universal alphabet—such a one as would supersede for Orientals themselves the necessity of writing in their own different characters the different languages distributed over the East. Could such be devised, it would be a great advantage for the acquisition of those languages by the West, months and perhaps years being now spent in mastering alphabets and syllabaries of complex kinds. Among the Polynesian islanders the European script has been successfully introduced and adopted, because they never had, till the appearance of European civilization among them, a mode of writing; and there was consequently no national *amour-propre* to contend with, nor any script already in use to supersede. It is not so in the East, amongst the various nations attached, from various causes, to their respective characters. But it is evident that, clothed in an European alphabet, there would be no greater difficulty in mastering many of the Aryan and Semitic languages by the Western scholars than in acquiring the different languages spoken in Europe—a task much facilitated by their having nearly one common mode of printing and writing the same sounds. It may be considered that the first step to unity among the European nations will be this adoption of a common alphabet, when entirely carried out, and nothing would more powerfully connect the East and the West than the removal of those barriers which prevent an easy acquisition of those keys of thought necessary for the mutual understanding and happiness of mankind.

It is a natural transition to pass from this subject to the consideration of the attempts made to introduce universal communication by means of Pasigraphy, or writing by ciphers. This system has been for some time in use in the West, and different ways have

been proposed to arrive at the result. One is the mode of communicating by signals, consisting of numbers, at sea. Certain sentences of general use are numbered and translated into the different European languages. The flag which carries the number speaks the same sentence, when hoisted, to vessels of all other nationalities; in fact, the number is an universal medium of maritime communication. A flag with a few numbers asks a question; another with fewer or more gives the answer. Now, this device contains the elements of an universal language, limited indeed to a few stereotyped sentences such as are generally wanted in maritime intercourse. A modification of this system has been adopted for the purposes of commerce, for the Transatlantic and other telegraphs, to supersede the necessity of long and continuous messages, which would take too much time and trouble in transmission. But the works compiled for this purpose are in the English language only. A modification of this principle will be laid before the Ethnographical Section, consisting principally in the substitution of numbers for words, the same number answering to the same equivalent word in all languages. It is evident that when dictionaries on this principle shall have been compiled, it will be possible for a limited communication to be held in writing with Orientals, of whose language the European is ignorant, in the same manner as by maritime signals. It is a step towards universal language, and, although a feeble one, probably the only step which will ever be made. Its value and defects will no doubt occupy the attention of the Ethnographical Section. It is not a language properly so called, but a means of interchange of thought, and might prove of the greatest value where other means are not at hand. Those divided by sounds will be united by numbers.

The Presidents of the various Sections will deliver their inaugural addresses, after which the papers accepted will be read before these different Sections, and the verbal communication will then be made. As some of the Sections have many more papers than can possibly be read or discussed at a sitting, the President of the Section will have it in his power to adjourn the sitting, should he deem it necessary, to another day, so as to admit of other papers being read. But it is evident that, in consideration of the numerous papers and subjects for deliberation with which the Congress has been honoured, it may

be impossible to read all communications, and some can only be noticed as received. Besides the sittings of the Sections, which are detailed in the Programme, the Congress will visit in the daytime the principal museums and institutions which contain objects of art and antiquity connected with the East. Its first visit will be to the British Museum, where such members as are interested in the different Sections will find abundant materials of the old and modern East to occupy their attention. The great Egyptian and Assyrian collections deposited in its galleries, and the numerous Phœnician, Punic, Himyaritic, and other Semitic inscriptions, are particularly worthy of notice, and the visit will be preparatory to the sitting of the Semitic Section, to which it will form an excellent introduction.

In order to reduce the labours of the Congress to a definite order the meetings have been reduced into Sections, one for each of the five days from the 15th to the 19th inclusive. These Sections are the Semitic, Turanian, Aryan, Hamitic, Archæological, and Ethnological. They embrace all the topics, linguistic and scientific, connected with the East. The Semitic Section will consider both the extinct and modern Semitic languages; in other words, to that Section has been relegated the consideration of such Semitic languages as are written in Cuneiform characters, for the Cuneiform inscriptions include some certainly not of the Semitic family. But the mass of the inscriptions of Assyria and Babylon are Semitic, and the characters and languages were extant from above twenty centuries B.C. to almost a century A.D., or the days of the Roman Empire. The discovery of the reading of the Cuneiform by Grotefend in 1803 was one of the most marvellous applications to the resolution of the problem of an extinct language of which there existed no bilingual inscription as a key. Since the evolution of the name of Darius, the study has advanced in an unprecedented manner, no fewer than five languages—viz. Persian, Median, Babylonian, and two sorts of Assyrian—having been deciphered and interpreted, and the history of these Oriental empires having been examined from their original documents and contemporary sources, thus relieving us from the necessity of relying upon secondary information afforded by Greek and other authors. The discovery of the Persian by Grotefend, subsequently perfected by the labours of

Burnouf, Lassen, and Rawlinson, was succeeded by that of the Babylonian and Assyrian by Hincks and Rawlinson; and it is precisely these last two languages which have produced a golden harvest of results, when their reading is completed by the labours of Prof. Oppert, Mr. G. Smith, and Mr. Fox Talbot. A light entirely new has been thrown on the mythology and history of these old Semitic nations. The fact of another language called the Accadian or Sumirian, extinct like the Assyrian, but not easily referable to a particular stem, although supposed to be of the Turanian stock, is an unexpected addition to the knowledge of the languages of Western Asia. It is not to be supposed that discoveries so startling have been received without incredulity or opposition. The nature of these languages, written in a complex syllabary which only finds its parallel in the abnormal script of Japan, and the difficulties which first attached to the decipherment of the names of gods and kings, caused the first attempts to be coldly received by scholars especially devoted to Semitic studies. These doubts have, however, since given way to convictions, and the truth of Assyrian researches has been finally recognized.

The study of these ancient languages, which may be classed as extinct, in contradistinction to those which, though no longer spoken, have yet had their knowledge preserved by tradition, and which are called the dead, is strictly inductive. The examination of the logical deductions to be made from the position of a word in different passages is found to be as important, if not more so, in determining their meaning as their comparison with words in existing or dead languages supposed to be cognate. The consideration of some of these points will occupy the attention of the Semitic Section, as well as the nature of the grammar and structure of the Sumirian, the Elamite, and the Median. Besides these linguistic questions, others in connexion with the history and mythology of the old Semitic nations will be considered in that Section. Nor is it more than necessary to revert to the priority that these early languages have in the study of comparative philology, owing to the undoubtedly remote age of the early monuments on which the languages appear, and their showing its change and development in the course of centuries. It is impossible to exclude these old grammatical structures, these oldest of all words, from the arena of that study, for without

them the study must be considered as incomplete. The same observation also applies to the researches into comparative mythology and the evolution of ancient religions, for it is only by the consideration of the Semitic myths that a true appreciation can be made of the extent to which Western Europe was influenced by the traditionary legends of Babylonia and Assyria. The researches also into the astronomy of Babylon and Assyria are scarcely less interesting, and the evidence of the cuneiform records of these people goes far to confirm the high antiquity traditionally handed down of the astronomical observations of the Chaldeans. If that branch of the subject is at present incomplete, at all events the labours of M. Oppert and Mr. Sayce have approached the subject, and it will be impossible to write the history of ancient astronomy, in which the Babylonian and Assyrian observations and astronomical knowledge are omitted If, indeed, the astronomy of these nations was disfigured by or due to a superstitious astrology, intermingled with omens, some bearing a great affinity to the practices of the West, there still remains the comparison of the astronomy with that of Greece, which was derived at a later time from the Alexandrian schools.

The historical inquiries have resulted in a still greater conflict of opinion, and M. Oppert will bring these divergences before the Section; for it cannot be concealed that the comparison of the chronology of the Jews and the Assyrians, as it at present stands, does not harmonize—there is a want of synchronism. It is not possible to decide at present where the error lies, but nothing but an act of violence, such as the alteration of text, or the forced hypothesis of an omission of years in the Assyrian canons, can at present reduce them to a common level. The difficulty has many bearings, and affects history generally; and could these differences be reconciled, that alone would entitle this Congress to be regarded as marking an epoch in the annals of ancient historical investigation. The unfortunately defective state of the present knowledge of the history of Babylonia, owing to the want of adequate monuments, which still lie inhumed in the country, prevents the investigation of the history of that country from being more accurately known, and some doubtful chronological and historical points from being settled. Considerable service to the publication of papers and memoirs on this subject has been rendered by the learned societies

in this country, particularly the Royal Asiatic Society, the Royal Society of Literature, and the Society of Biblical Archæology, and by different scientific journals, especially the *Zeitschrift für Aegyptische Sprache* of Berlin.

The Turanian Section comprises all the languages of that class, and will in the present Congress consider subjects connected with the Chinese language and literature. It is not necessary here to do more than briefly allude to the extent of the literature of China and the mass of old writings which have survived the repeated conflagrations which have overtaken it. Notwithstanding the labours of the French Sinologists, especially M. Stanilas Julien, numerous points of historical interest remain to be considered. One that came under their notice was the history of the Han dynasty, a period remarkable for its relations with other States, and its political reforms; for it was in that remote period that the system of competitive examinations was first introduced into the political organization of the Chinese Civil Service. A translation of the most important works of that time was proposed at the Congress of Paris, 1873, and, could it be carried out, would add considerably to the knowledge of the geography and ethnology of Indo-China. So many subjects of interest about Japan were discussed at the Paris Congress, that there remains scarcely any of great importance to treat of in the present Congress; but the study of Japan, its language and its literature, deserves our highest sympathy, from the remarkable phenomenon of the welcome Japan has offered to Western civilization, and the fact of its interesting peculiarities of language and writing, notwithstanding the impress it has received from the Chinese script and literature. The comparison of its language with others of the Turanian family deserves great attention.

One of the subjects which will be referred to in the Turanian Section is the interpretation of the Etruscan language. That tongue, which belongs to the extinct class, has exercised the ingenuity of Europe for more than a century, and the difficulty of solving the mystery has always been a reproach to the power of decipherment and interpretation exhibited in the rapid progress made in the Semitic Cuneiform and Hamitic Egyptian. Since the work of Lanzi, various inquirers have referred it to the different European languages, Lanzi himself to the Greek and Latin, Sir William Betham to the Irish, M. Judas to the

Hebrew, another inquirer to the Teutonic, and the Rev. Isaac Taylor to the Turanian stem. Mr. Taylor proposes laying his views before this Section, and the subject is one worthy of the attention of the Congress, as in the discussion that will very likely ensue it will probably be shown whether it should be considered a Turanian or an Italian dialect, to which latter class the opinions of scholars have generally inclined to assign it. The views of Mr. Taylor will, however, have specially to be considered, and the proofs he wishes to bring forward in favour of his hypothesis will be passed under examination. The great difficulty about the Etruscan language is that the words do not appear to be directly connected with the Italian dialects as they are at present known, and the inscriptions are, although numerous, too short to enable sufficient comparisons to be made to determine logically the meaning of words not being proper names which are found in the different texts.

The Aryan Section will have papers on the Sanskrit literature and subjects connected with it, and the flood of light which the study of this language has thrown on the history of European languages has made its study the most favoured of Oriental languages. There is supposed to be found the original source of the very tongue in which this Address is delivered. It is, as all are aware, a literary, not a monumental language, as no monuments inscribed in Sanskrit or its nearest Indian dialects are older than the fourth century B.C. It is a problem yet to be solved, what was the oldest Aryan alphabet? Was it Greek, Syrian, or Lycian? As yet none is known older than the seventh century B.C., and of course they are all comparatively recent compared with the Egyptian and Babylonian. Among the languages of the Aryan Section attention should be directed to the Lycian, as it is certainly one of the oldest which appear on the monuments. This dialect, limited to a small locality in the south-western coast of Asia Minor, and written in a mixed Greek and Phœnician alphabet, has not yet been interpreted to any extent, although the alphabet has been deciphered. It was in 1839 that the late Sir C. Fellowes first brought to England trustworthy copies of Lycian inscriptions. Several of these were bilingual, and the language has been supposed to resemble the Zend; but the interpretation has been suspended, and although attempts have been recently made to affiliate it to the Slavonic and even to one of the Celtic languages, it must still be

classed, like the cognate Carian, among the extinct or unknown languages of Asia Minor.

The Hamitic Section will represent the progress made in Egyptology since the first discovery of the mode of deciphering and reading this pictorial language of Ancient Egypt in 1817. It is not necessary here to enter into a detailed exposition of the mode of decipherment and interpretation of the hieroglyphs which was aided by the trilingual inscription of Rosetta, and did not require so great an effort of the mind to discover as the cuneiform. The only difficulty was to divest the mind of the idea that figures and representations of objects were not used as pictures, but as phonetic ciphers. That point reached, the difficulties rapidly disappeared, and the inductive method pursued with a mathematical rigour by the first inquirers and by later students has evolved alike from the grammar and the dictionary the relation of the Ancient Egyptian to the Coptic. So great has been the progress made that the purport of all texts and the entire translation of most is no longer an object of insurmountable difficulty. As in the case of Assyria, the history of Egypt has been revealed from the monuments, and a mist which hung over the learned labours of the past century has been dispelled, and although the chronology of Egypt presents unfortunately too many gaps to justify precise determination, yet sufficient evidence has been obtained to prove the immense duration of the Egyptian Empire. It is, however, one of the marvels of Egypt and its early civilization that it starts already full grown into life in the valley of the Nile as a nation highly advanced in language, painting, and sculpture, and offers the enigma as to whence it attained so high a point of development. There is no monumental nation which can compete with it for antiquity, except perhaps Babylonia, and evidence is yet required to determine which of the two empires is the older. As far as an opinion can be formed from archæological considerations, there is a greater weight of evidence in favour of gradual development in Babylonia. Some of the linguistic tablets in terra-cotta found in that country have recorded the transition in that region in characters gradually developing from the purely pictorial into the conventional cuneiform; but no Egyptian inscriptions, as yet discovered, are written exclusively, or even mainly, in hieroglyphs used as pictures only in contradistinction to sounds. All, even those of the most remote antiquity, are full of

phonetic hieroglyphs. The arts of Egypt exercised an all-powerful influence on the ancient world—the Phœnicians copied their types, and Greece adopted the early Oriental style of architecture, for the Doric style came from Egypt, the Ionic from Assyria, the later Corinthian again from Egypt. If Phœnicia conferred an alphabet on Greece, Egypt suggested the use of such characters to Phœnicia. Already, in the seventh century before Christ, the hieroglyphs represented a dead form of the Egyptian language, one which had ceased to be spoken, and Egyptians introduced a conventional mode of writing simpler than the older forms, and better adapted for the purposes of vernacular idiom. Egyptian philosophy—the transmigration doctrine of Pythagoras—that of the immortality of the soul of Plato—pervaded the Hellenic mind from the colleges of Thebes. The wisdom of the Egyptians was embodied in ethical works of proverbs and maxims as old as the Pyramids, and as venerable for their hoar antiquity as the days of the Exodus. The frail papyrus, the living rock, the temple, and the tomb, have all preserved an extent of literature found nowhere else. The motive was a religion which looked forward to an eternal duration or the return of the past to the future. The national poem of Pentaur is found on the walls of Thebes, and the papyrus of Sallier. The Book of the Dead was alike sculptured on the tombs and written on the roll—it embodied much of the symbolic though less of the esoteric doctrine. The Elysian fields, the streams of Styx, burning Phlegethon, the judges of the dead, are Egyptian conceptions; the Sun-worship is Egyptian; medicine and astronomy, geometry, truthful history, and romantic fictions, are found in an extensive literature. Many dogmas and practices of an Egyptian origin have descended to the present day, and exercise more influence than is generally supposed on modern religious thought.

Here it is not possible to do more than allude to the services rendered to Egyptian interpretation by Professors Lepsius, Brugsch, Lauth, Ebers, and Eisenlohr, in Germany; M. Chabas, the late Vicomte de Rougé, and M. Maspero, in France; and Mr. C. W. Goodwin and M. Le Page Renouf, in this country. But it is in Berlin alone that a journal specially devoted to Egyptology appeals to us as the recognized organ of students for the language and antiquities of the Valley of the Nile. From Brugsch Bey, who attends

this Congress as the representative of that enlightened ruler the Khedive of Egypt (who has done so much for the revival of the knowledge of the ancient condition of the country over which he rules by the excavations he has sanctioned or undertaken at the suggestion of M. Mariette, and by the valuable publications of Brugsch Bey and M. Mariette, the heavy cost of which His Highness has undertaken), the Hamitic Section will hear a lecture of great interest on the point of departure of the Exodus from the Land of Bondage.

The subject of Archæology, both local and general, has been the object of so many Congresses that only a small part of this vast subject can fall into the scope of the present Congress. Archæology treats of the ancient Oriental ethnology—of the earliest and the existing civilization of the East. Both enter extensively into the history of the human race, and without their aid no description of ancient life, however brilliant, is complete. The ancient monuments of India will come under the consideration of the Archæological Section, as also the always interesting subject of the Great Pyramid, about which many opinions have prevailed, although the only one received by Egyptologists is that it was the sepulchre of a monarch of the fourth dynasty. There is one subject connected with the archæology of the East to which your attention should be specially directed, and that is the extensive forgeries of Oriental inscriptions and other objects perpetrated in late years at Jerusalem and in Arabia. With the increased value placed on works of ancient art, the attention of forgers has been directed to the production of spurious monuments. Some of these are too gross to effect the deception they wish to effect; but others require a considerable practical knowledge of works of ancient art to detect. Now, the labours of the philologist are incomplete without the advice and assistance of the archæologist, without which erroneous ideas may be entertained as to the relative value, the truth or falsity of ancient monuments. Hence an archæological section which shall discuss such difficult points is essential; besides that, it serves also to connect the studies of art and literature. In some branches of archæology—such, for example, as the study of gems or engraved stones—the number of recent imitations is greater than that of the really ancient remains, and this, unfortunately, in proportion to their beauty and excellence, so that archæologists are accustomed to look with great scrutiny and suspicion at these works

of ancient art. Nor are there present in these objects those criteria which, as in the instance of coins, aid to determine the authenticity of the particular object under consideration. The philological inquirer often, on the hand, renders equal aid to the archæologist by determining the relative age of different objects of antiquity.

A Section of the Congress is devoted to Ethnology—that is, the consideration of the present actual condition of the different races of the East, just as archæology considers their past civilization. Ethnography is intimately connected with another branch of inquiry—viz. anthropology, which is limited to the relative physical conditions of the races of men. In the Ethnological Section those subjects will be considered which do not belong to the province of philology or archæology. They are all most intimately connected. In fact, a knowledge of ethnology is essential to the study of archæology, just as in the natural sciences the intimate acquaintance with living species, fauna, and flora is essential to the due comprehension of extinct races of animals. Many obscure points in archæology are cleared up by ethnological studies, which teach what is going on at the present day among peoples not more highly advanced in civilization than the predecessors of the most highly civilized races at the most distant period to which archæology can point as the most remote historical age. In the consideration of the diversities of race, ethnology also renders invaluable aid to the philological considerations which guide us in the determination of the relative periods of the oldest civilizations of the East. For language alone is not a sufficient criterion for deciding a point so remote from observation and so delicate, change of language not always implying diversity of race. It is to ethnology as well as to archæology and philology that we must look for the solutions of the problem, whence came the first inhabitants of the valley of the Nile, the alluvial plains of Mesopotamia, the valleys of the Himalayas, and the banks of the Yangtszekiang, the isles of Japan, the shores of Indo-China, with all their internal varieties, the Ainos, the Miautsze, the natives of the Andaman Islands—in short, the general state of the question of the early immigrations which were made before history was written, or tradition definitely handed down. Some of these questions will occupy the attention of the Ethnological Section, and will receive ample illustration from the contributions and memoirs offered to it. Under the head of ethnology

have been classed the sciences, and the products, natural and artificial, of the East. The glyphic and graphic arts have indeed been assigned to the Archæological Section; but the arms, implements, weapons, the manufactures, the products of human ingenuity in any shape, are portions of the study of ethnography, and as such will be considered under that department. The development of the so-called stone and bronze ages of the East, their contributions to the general knowledge of the conditions of the first inhabitants of the globe, are particularly interesting to all inquirers, when it is borne in mind that the cradle of mankind has, by universal consent and uniform tradition, supported by direct historic proofs, always been placed in the East, and that the early European races emerged subsequently from an originally uncivilized condition. These younger children of time derived the first elements of their civilization from contact with the East, then, relatively, far more advanced, placed under more favourable circumstances, and surrounded by those productions of nature which have ever contributed to the comfort, luxury, and refinement of mankind and to the development of the arts and sciences. These natural products it is impossible to do more than allude to, they are so numerous—valuable metals, precious woods, gums, spices, the teeth of animals, the ivory of the hippopotamus and the elephant, the nutritive fruits almost superseding the necessity of the cultivation of grain, the thousands of products of the animal, vegetable, and mineral kingdoms have at all times directed the attention of the West to the East, just as in the East itself they have called forth some of the greatest efforts of human ingenuity, and have given rise in past ages to discoveries relatively as great and important as those which, in modern Europe, cease to astonish us, simply because of their universal diffusion and daily use. All these can be made objects of inquiry, but it will be impossible in a single sitting to do more than allude to the subject, or to read such papers on these points as may be submitted to the Section. In the present Congress, however, there are many present who can throw light upon whatever it may seem desirable to discuss under these several heads.

There only now remains to mention the assistance rendered to Oriental studies by the Universities and learned societies of Europe, who, in addition to the interest with which they have received memoirs on subjects connected with the East, have many of them

sent delegates and representatives to the present Congress. In this country the Royal Asiatic Society has generally encouraged the advance of Oriental learning, especially the Aryan and Turanian sections. The Royal Society of Literature has also, besides Greek and Roman antiquities, promoted the study of Egyptian hieroglyphs. The new Society of Biblical Archæology has also, though last, entered with the greatest interest on the route of Semitic and Hamitic languages, as well as the archæology of lands connected with the Bible. In order to bring this knowledge before all classes of the public by the publication of the "Records of the Past," and in order to revive the study of Oriental learning, it has proposed a series of lectures on Assyrian and Egyptian philology. The *Journal Asiatique* in France, and that of the German Oriental Society at Leipzig, are the known organs of all Oriental languages in those countries, and the special sections of Egyptian and Assyrian research have been well represented in the *Zeitschrift für Aegyptische Sprache und Alterthumskunde* of Berlin. It is to be hoped that all these exertions will not have been in vain, and that this Congress, demonstrating the growing importance of Oriental studies, will attract fresh inquirers to these studies, and such as will sustain hereafter the brilliant reputation achieved by those now present in the pursuit of Oriental inquiry. Nor can this Address be closed without asking you to join with me in an expression of our thanks for the countenance afforded to this Congress and this country by the Governments of Europe, by Germany, Italy, Portugal, Russia, Egypt, and others, whose enlightened rulers have sent representatives from Universities and other public institutions.

THE SEMITIC SECTION.

ADDRESS

BY

MAJOR-GENERAL SIR HENRY RAWLINSON, K.C.B., PRESIDENT.

THE Section of the Congress which I have now the honour to address has been organized for the purpose of giving to Orientalists an opportunity of interchanging their ideas, with regard to that group of languages to which the conventional name has been given of Semitic. This group has always possessed an interest beyond, and independently of, its linguistic peculiarities, in consequence of its having been the medium, to use the words of Dr. Pritchard, "of handing down and perpetuating the dictates of divine revelation." Semitic studies, indeed, have been cultivated in all ages, mainly from their connexion with the Hebrew Scriptures, and even now discoveries in this field of research are chiefly valued by the public for the light which they throw on the Mosaic account of the early history of mankind. The Congress of Orientalists, however, will, probably, attach more importance to philological than to historical or religious considerations, and will be disposed to discuss Semitic literature and the Semitic languages in their general, rather than their special, relations. The time is hardly yet come, perhaps, for sound generalization in regard to the origin, development, and scientific classification of the Semitic languages. At any rate I have not the requisite knowledge or leisure to grapple with such a question. All that I propose to do in opening this Section is to draw attention to the very enlarged proportions that have lately been given to Semitic research. Not only have our Phœnician materials been more than doubled since Gesenius

wrote his famous text-book on the relics of that language, but Southern Arabia has yielded a mass of inscriptions from copper plates and sculptured rocks, which have brought the old Himyaritic language fairly within our grasp; and more recently Assyria has been added to the list, sustained inquiry having opened up to the investigation of scholars that ancient language, which, as far as our present knowledge extends, would seem to be one of the earliest members of the wide-spread Semitic family. Educated Europe was very slow to admit the genuineness of Cuneiform decipherment. It was asserted at first as a well-known axiom, that it was impossible to recover lost alphabets and extinct languages without the aid of a bilingual key, such as was afforded to Egyptologists by the famous Stone of Rosetta. Our efforts at interpretation were therefore pronounced to be empirical, and scholars were warned against accepting our results. I have a vivid recollection, indeed, of the scornful incredulity with which I was generally received when, in 1849, I first brought to England a copy of the Babylonian version of the Behistun Inscription, and endeavoured to show that, by comparing this version with the corresponding Persian text, I had arrived at a partial understanding of the newly discovered records of Assyria and Babylonia. I did not assume to have done more than break the crust of the difficulty, and yet I obtained no attention. Hardly any one in England, except Dr. Hincks and Mr. Norris and the Chevalier Bunsen, was satisfied of the soundness of the basis of inquiry. Nor, indeed, did the study make much progress for a long time afterwards. Semitic scholars, like M. Renan, accustomed to the rigid forms and limited scope of alphabets of the Phœnician type, were bewildered at the laxity of cuneiform expression, where phonetic and ideographic elements were commingled; and refused to admit the possibility of such a system of writing being applied to a Semitic language. Biblical students, again, were not favourable at first to the idea of testing the authenticity of the Hebrew records by comparing them with the contemporary annals of a cognate people, and for a time ignored our results; while the Classicists of this country, who followed the lead of the late Sir George Cornewall Lewis, calmly asserted the superiority and sufficiency of Greek tradition, and treated our endeavours to set up a rival school of historical criticism, derived from a barbarian source, almost with contempt. Struggling thus against disbelief and

prejudice, our progress in this country was for many years slow and unsatisfactory; but at length, as materials increased, and competing intellects, engaged in the study of the inscriptions, arrived at almost identical results, the attention of Europe was aroused and Assyriologists received a more respectful treatment.

It would be out of place on an occasion like the present to trace in any detail the early stages of Cuneiform decipherment, or to attempt to apportion among the first pioneers in this difficult branch of study their respective shares in the credit of discovery. Still, there are some names, both among the living and the dead, to which, even in this hasty sketch, I cannot help referring. The obligations which Assyriologists owe to the late Dr. Hincks and the late Mr. Norris can hardly be overstated, while there is still one among us who, if he did not commence work quite so early as his English fellow-labourers, carried on his researches with an energy, a perseverance, and a happy boldness, which soon enabled him to outstrip them. I allude to Dr. Jules Oppert, of Paris. If any one has a right to claim the paternity of Assyrian science, as it exists at the present day, it is certainly this distinguished scholar, who, having enjoyed the advantage of a personal investigation of the Assyrian and Babylonian ruins, now twenty-three years ago, devoted himself on his return to Europe to the prosecution of cuneiform studies with a vigour and ingenuity, neither deterred by opposition nor discouraged by neglect, which ultimately led to a complete success, gaining as he did for himself the Quinquennial Prize of the French Academy, and thus obtaining the attestation of the first critical body in Europe to the genuineness and importance of the studies on which he was engaged. This, indeed, may be considered the turning-point of cuneiform research; hitherto there had been doubt and disparagement; henceforward Assyriology took its place within the recognized pale of Oriental science, and the study of the inscriptions steadily advanced. France well sustained her claim to the prominent place which Dr. Oppert had first acquired for her. M. Menant, who was at an early period associated with him, exerted himself to popularize a difficult subject; while the indefatigable François Lenormant, following closely on their footsteps, has since pursued a brilliant career of discovery and daring research, which in his particular line of study has placed him far ahead of all competitors. Waldemar Schmidt in Denmark, Finzi

in Italy, and Naville of Geneva, have also joined our band of Assyriologists; while Germany, although coming late into the field of Assyriology, has at once assumed a leading position in regard to the most essential branch of the inquiry, from which she is not likely to be soon displaced.

It is, indeed, a searching and elaborate critical power, combined with intense application and a thorough mastery of the Semitic languages,—rather than conjectural translation, however happy, or premature generalization, which is too apt to mislead,—that is now required for the advancement of Assyrian knowledge; and as such qualifications are pre-eminently possessed by Professor Schrader and Dr. Prætorius, who are at the head of the cuneiform scholars of Germany, I am inclined to look to them as our future leaders in this interesting study. The contribution of England of late years to the science of Assyrian philology has perhaps hardly kept pace with its early promise. Mr. Norris's Dictionary and the three volumes of inscriptions which I have published for the British Museum have supplied, no doubt, very useful and extensive materials for scholars to work upon; while the independent labours of Mr. George Smith, of Mr. Fox Talbot, and of the Rev. Mr. Sayce have thrown much light on the history and geography and half-developed science of the Assyrians, as well as on their mythology, and especially on their primitive legends and traditions; but, notwithstanding the wide extent of these researches and their great merit, as additions to our knowledge of the early world, I am bound to say that nothing has lately appeared in this country which, in my opinion, is equal in value, in a philological point of view, to the researches of Schrader and Oppert; and I am further inclined to think that until some accomplished Semitic scholar, such as the late Dr. Lee or the late Dr. Cureton, shall take up cuneiform inquiry in England and devote himself exclusively to it, we must be content, as far as critical accuracy is concerned, to follow in the wake of our Continental brethren.

At the same time I am far from wishing to disparage the labours of the English school of Assyriology, or to deter young disciples from joining our ranks. What I complain of is—and I am fully as culpable as my fellow-labourers in this matter—that we have hitherto devoted ourselves to the sensational rather than the practical branch of the inquiry, and have thus built up a superstructure on insecure

foundations. Historical discovery and the illustration of obscure points of ethnology and chronology are no doubt more attractive studies than dry disquisitions on grammar and etymology,—more attractive in their nature, and more likely to command the attention of the public; but the dry studies, nevertheless, are, or ought to be, a necessary preliminary to the others, whose very attractiveness, indeed, is almost in an inverse ratio to their philological value. While I congratulate, therefore, Mr. George Smith on his great achievements in recovering the lost history of early Babylon; in bringing to light the primitive traditions which the Babylonians held, in common with the Hebrew colonists who migrated from Chaldæa to Palestine; in fixing by means of Assyrian records the chronology of Western Asia, and giving for the first time a consistent and continuous account of the Assyrian Empire; and while I also congratulate Mr. Sayce on the general accuracy of his readings, and especially on his success in partially explaining the astronomy and astrology of the early Chaldæans; I do most earnestly recommend both of these scholars to pay more attention in future to the rudiments of the study than to its higher branches. It would be desirable, I think, in all future publications, to accompany the translation of every sentence with its grammatical and etymological analysis, especial care being taken to compare the corresponding roots and inflections in the cognate languages, not at random or from a fancied resemblance of sound, but according to the established rules of euphony and grammatical change. As matters stand at present, we are far from having overcome the elementary difficulties of phonetic representation. Notwithstanding, indeed, the numerous alphabets and syllabaries that have been published, there are still many cuneiform characters of doubtful power, while the vernacular names of the gods, which enter so largely into the composition of Babylonian and Assyrian proper names, and are thus essential to historical identification, are for the most part rendered conventionally and provisionally. For my own part, I should hail the determinate reading of these names—a result, which in default of direct evidence can only be obtained by a very large and laborious induction—as a more substantial advance in Assyriology than the discovery of a new dynasty of Kings or the complete explanation of the whole series of astronomical tables.

Let me, then, impress upon all young Semitic scholars who desire

to take up the study of the Cuneiform Inscriptions to begin at the beginning; to learn thoroughly the alphabet and grammar of the Assyrian language before they attempt independent translation; and only gradually to ascend into those higher regions of inquiry which will be brought before the Section by the experienced scholars around me.

In the mean time we are doing good service in this country to the common cause in accumulating materials. Mr. George Smith, during his last two visits to Assyria, has added several thousand fragments of tablets and cylinders to the already large collection deposited in the British Museum; and our fourth volume of the Cuneiform Inscriptions of Western Asia is now on the eve of publication.

It is a satisfactory proof of the high place which Assyriology has now taken in the estimation of Semitic scholars that the communications which are promised for our Section are all, with one exception, connected with the study of the Cuneiform Inscriptions; and, indeed, as I make no pretension myself to any extensive or critical knowledge of the Semitic languages, it can only be to my early connexion with Cuneiform decipherment and the interest which I have ever taken in the subject that I am indebted for the high honour of being called to preside over this Section. I now declare this Section to be open, and invite the members to proceed to business.

ON DR. HINCKS'S "PERMANSIVE TENSE" IN THE ASSYRIAN VERB;

With special reference to the First Person Singular, terminating in *-KU*.

By the Rev. G. C. GELDART, B.A.

[*Principal Assyrian Authorities.*—1. Dr. Hincks's Specimen Chapters of an Assyrian Grammar, Royal Asiatic Society's Journal, December, 1866.—2, Dr. Oppert, Grammaire Assyrienne, seconde edition, 1868.—3. Rev. A. H. Sayce's Assyrian Grammar, 1872.—4. Prof. Schrader's Die Assyrisch-Babylonischen Keilinschriften, 1872.]

As not a decipherer in Cuneiform, I should feel bound to apologize for this paper, were I not convinced that specialists in that line will find it impossible to bar the judgment of the general philologist upon the linguistic facts they present to him. If this is not desired, it were better not to transliterate; for they can hardly decline his comments upon that to which they invite his attention by rendering it legible for him. Of course the non-decipherer must confine himself rigorously to that the reading of which is undisputed. For instance, in Assyrian, the only language here concerned, I simply pass by the word which Dr. Hincks and the Rev. A. H. Sayce read *salṭak*,[1] while Dr. Oppert and Prof. Schrader give *salṭa epus*;[2] but, as a matter of fact, the mass of unquestionably ascertained Assyrian words and forms is so large, that there is ample material for the non-deciphering philologist to work upon.[3]

[1] Hincks, chap. v. § 16; Sayce, Gram. p. 66.

[2] Oppert, Préf. p. xxi.; Schrader, p. 359.

[3] Let me here express my cordial concurrence in Prof. Schrader's desire that some uniform system of transliteration could be adopted. Throughout I have, as far as possible, preserved each author's peculiar method; but the result is, that the same word appears in different parts of the paper in different forms, as *sarraku*, *sarracu*,

I have to acknowledge some assistance from Mr. Sayce, given with the more kindness and candour because I am unable to accept certain conclusions of his excellent and copious Assyrian Grammar.

I.

When, in 1850, the process of Assyrio-Babylonian decipherment opened with Sir H. C. Rawlinson's[1] description of the third column at Behistun, no statement excited more astonishment than the following: that the language, closely allied as it was to Hebrew, exhibited nothing corresponding to the perfect תִּי־, קָטַלְתָּ, etc., *i.e.* a tense constructed only by affixes without preformatives. The Persian forms, which were evidently preterites, were represented on the Semitic side by the manifest analogues of תִּקְטֹל, אֶקְטֹל, etc. The progress of research, however, discovered something that looked a little like the Semitic perfect. There appeared forms in *-ku* clearly connected with the first person singular, as *sarraku* 'I am king;' and since *-ku* is the afformative of that person in the Æthiopic perfect, as ገብርኩ: *gabar-ku* 'I made,' Dr. Hincks,[2] in 1866, assuming a theme פגל, placed a form *paglaku*, with Babylonian variant *paglak*, at the head of a tense which he named the "Permansive." Then, as there were other forms which seemed like third persons, he set these at the bottom, and filled up the gaps with so-called "restorations," *i.e.* with imaginary combinations of his theme with personal pronouns, as, from פגל+*atta*, second person singular *pagilta*, etc., etc. Thus did he construct something which, though corresponding in form with a Semitic perfect tense, did not so in power; since it bore no reference to time, but merely affirmed the connexion of a certain base as predicate with the personal pronouns as subjects. For he did not pretend that *sarraku* was the precise temporal equivalent of מָלַכְתִּי, though he maintained it was just as much a verb;[3] while that it

etc. What Hincks and Schrader write *salṭak*, would be with Oppert שַׁלְטַךְ, and is with Mr. Sayce *saldhaq*. His *c*=*k* of II. and Sch., and כ of O.; his *k*=O.'s ק, II.'s *q*, and Sch.'s *ḳ*; while his *q*, introduced in the middle of the Grammar, represents the indefinite character whereby in Cuneiform ג, כ, and ק are alike expressed at the end of a syllable. Would not, for the consonants, the Hebrew alphabet be most convenient, with some modification of the points for the vowels?

[1] Royal Asiatic Society's Journal, vol. xii. part ii. p. 413.

[2] Chap. v. § 8.

[3] This is implied in his comparison of it with *malakta*, II. Sam. iii. 21, chap. v. § 15.

answers in meaning to the Assyrian *anaku sarru*, Heb. אָנֹכִי מֶלֶךְ 'I am king,' is admitted on all hands.

Against this figment of a tense, foreign Cunealogists raised a protest, in which I am compelled in some measure to join. First, they objected decidedly to the "restorations"; next, they denied that *sarraku* was a verb at all, and, consequently, that it was any part of a tense.[1] But here let me at once define the position I propose to maintain, which is that of conciliation between the two parties, viz. Dr. Hincks, with his latest follower Mr. Sayce, on the one side; and Dr. Oppert, with his ally Prof. Schrader, on the other. I hope to prove that while the foreign scholars are quite justified in refusing to Hincks's *sarraku*, etc., the title of "verb," they are not borne out in their rejection of certain other instances produced by him and Mr. Sayce; and that while Mr. Sayce is quite right in claiming for these examples the designation of "verb," he went too far in asserting it for certain of those to which his colleagues abroad deny it. We shall then essay a definition of the use of the afformative *-aku*, broad enough to reconcile these seeming discrepancies; and shall, lastly, show that this usage, such as we describe it, is by no means unique in Assyrian, but capable of illustration and confirmation from other Semitic languages.

II.

Rejecting, then, all words of which the reading is contested, as *salṭak*, *uẓbaku*, *ẓibáka*,[2] let us turn to the series of eleven forms in *-aku* referred to by Hincks,[3] and printed at length as, "for this mode of expression, the classical passage," by Prof. Schrader. Among them we have: 1st, *sarraku* 'I am king;' 7th, *ristanaku* 'I am foremost;' 11th, *ẓikaraku* 'I am manful.' How Hincks,[3] with these words

[1] Oppert, Préf. p. xix.; Schrader, pp. 304, 391.

[2] Ch. v. § 15; Schrader, p. 305—"*sarraku bilaku nahdaku gisraku kabdaku surruḫaka* (sic) *ristanaku ursanaku karradaku* [? *ḳarradaku*, "*qar-rad ili*," 'warrior of the gods,' Mr. G. Smith's Assurbanipal, p. 217, inscript. l. 5.] *dannaku va ẓikaraku Assurnaṣirhabal sarru dannu sar Assur . . . . . anaku.*"

[3] Hincks's misconception of the grammatical value of *sarraku*, etc., seems to have arisen from a notion in his mind that because every proposition implies a verb, it must explicitly exhibit one. Hence, chap. v. § 17, he talks of a passage where *anaku* is "used as a verb, there being no other in the sentence." This annihilates at once the distinction between verb and pronoun; because in such phrases as אֲנִי יְהוָה,

before him, could regard the formation, of which they are types, as one "specially,"[1] or "distinctively pertaining to verbs," is to me as "inconceivable"[2] as to Prof. Schrader. With the latter I find it impossible to suppose that the vowels of *ristanaku, zikaraku,* could ever have belonged to any part of a verb. Again, if *ristan-aku* be a verb, then is *ristan* a verbal base, instead of what we know it to be, a numeral adjective of highly complex construction. Starting from *ris* 'beginning, first,' we have *ristu* 'first part,' then *ristan* 'first ordinal number.' And so probably of the other words in this paragraph, which, as Schrader says, are formed on bases which, "by the very nature of the case, never do, nor ever can appear as verbs." But there remains the question—are none other of these compounds in *aku* ever formed upon verbal bases? What is to be said of Hincks's sentence, unnoticed by either of his opponents, nor quoted even by Mr. Sayce—*sa.ni.na . . . . la i.sa.a.ku*[3] 'rival I have not'? Can it be affirmed that the root ישא, with which the pronoun *anaku* is here combined, ever appears in any other form than those belonging to verbs; or that the compound *isaaku,* including the pronoun as subject, and governing the noun *sanina* as object, is not as much a verb as the single words *habeo,* ἔχω, or Gothic *haba* and *aih*? Take again the forms cited by Prof. Schrader:[4] 'To Merodach I am constant' (*ka-ai-*

נַעַר חוּא, אַתָּה הָאִישׁ, unless the nouns are to be called verbs, there is no other word but the pronoun to bear that name. And so, no doubt, since the proposition *sarraku* 'I (am) king,' contains but one word, that one must be a verb. But surely the right account is, that in such cases the verb is not present at all, but understood. And here, perhaps, we may adduce an illustration which, though brought to the present subject from a distance, can hardly be called far-fetched, if we compare the way in which such sentences are treated by the Scoto-Gaelic language and its degenerate sister, the Manks. In the former, 'I am the door,' is in the Authorized Version, thus expressed, *Is mise an dorus,* where *mise* is the emphatic pronoun of the first person, and the verb *is* the copula. But from Manks, *is,* in its use as a copula, has been lost; and the same sentence is therefore rendered thus: *Mish y dorrys*; *mish* being identical in etymology and almost in sound with Scoto-Gaelic *mise.* Yet surely the grammatical description of the latter sentence is not, that in it, *mish,* which in Scoto-Gaelic was a pronoun, has in Manks become a verb; but that in Manks, now deprived of the verb, the verb has to be mentally supplied. Exactly the same contrast between the two languages is displayed in all the texts hereafter cited for the use of the Syriac *eno.*

1 "besondere verbal-form," Schr. in *loc. cit.*

2 "unbegreiflich," pp. 391, 392.

3 Ch. v. § 18.

4 p. 305.

-na-ak); 'I fail not' (*la ba-aṭ-la-ak*). Prof. S. himself admits *kaainak* to be based on the form *kayan*, which he deduces from the root כין; and if the vowels of *kaainak* are not exactly what we should expect in any part of the tense of a verb, they present no violent discrepancy from such. But what is there in the vowels of *baṭlak* to disqualify it as an inflexion of the Arabic and Aramaïc verbal root بَطَلَ, בְּטֵל, more than in the vowels of the first pers. sing. بَطَلْتُ *baṭaltu*, בְּטֵלְתִּ *beṭēlēth*? and the word itself is to all appearance simply a verb intransitive. Yet further, Mr. Sayce affords us at least two specimens of the *ku* form which are not only "distinctively and specially verbs," but, like *isaaku*, transitive ones governing an object. I refer to the passage, *puputa rabacu acala dabsacu*[1] 'crops I increase, corn I mature.' Unless, then, the reading be disputed, which it has not been in Prof. S.'s critique of Mr. Sayce's Grammar, I think we have here two words which are as genuine and complete verbs as any in the compass of language. Action and subject of the verb are united in the forms *rabacu*, *dabsacu*; and the object expressed separately in *puputa* and *acala*. I quite agree with Mr. Sayce that, "however possible it may be to imagine a substantive in . . . . . *sarracu*, *zicaracu*, this is altogether out of the question with *rabacu* and *dabsacu*," and, substituting "verbal forms in *cu*" for "Permansive Tense," I can adopt, without limitation, his statement that "these two words alone are quite sufficient to establish" the existence of such in Assyrian.

Taking, then, this position, that *sarraku* and *ristanaku* are not verbal, but substantival and adjectival forms, and that *rabacu* and *dabsacu* are true verbal forms and nothing else, the question arises, what comprehensive definition or account of these forms in *-ku* are we to give so as to reconcile these adverse conclusions? Here two views presented themselves to my own mind as conceivable. First, should the date of the inscriptions justify it, might we not consider this a case of linguistic (*sprach-historisch*) development in time, and place the forms in a series whereof *sarraku* shall be the first, and *dabsacu* the last, term? the process of pronominal combination having originated with nouns, and terminated with verbs. This, of course, postulates that the inscription with *dabsacu* should be comparatively recent, and that with

[1] p. 67.

ristanaku, ancient. But a personal reference to Mr. Sayce[1] informs me that chronologically "it is impossible to give any priority to either of these forms; indeed, so far as one's evidence goes, the latter would be older than the former." This conjecture then vanishes, and leaves us apparently but one other way of treating the case, viz. to arrange these *-ku* forms not in a line, but in a circle, and to affirm that, *during the whole Assyrio-Babylonian period of Semitic, this affirmative -AKU or -AK, which subsequently, as the Æthiopic language shows, became restricted to verbal bases, was capable of attaching itself indifferently to these, to substantival, to adjectival, and, in short, to all bases susceptible of inflexion; and only fortuitously became subject to the limitation which we find in Æthiopic.*

III.

For that the Æthiopic form of first pers. sing. perf. in *-ku*, as in *gabar-ku*, is identical with this Assyrian *-aku*, there can, I think, be little doubt. Such a form could never have been evolved within the Æthiopic itself, such as we know it; because in it, as in Arabic and Aramaïc, the first personal pronoun wants the palatal terminal element which appears in Assyrian, Hebrew, Moabitic, Egyptian, and Sub-Semitic; and which must therefore have come down from that primitive unity of Semitic speech, whereof Assyrian is the truest representative, as in Aryan is Sanskrit. In Æthiopic, Arabic and Aramaïc "I" is *ana*, *anā*, *eno*; but not *anaku*, אֲנֹכִי, אנך, *anok*, *nec*, etc. And further, the identity of this *-ku* termination with that afformative of the first person which appears in Arabic as ـتُ *tu*, in Hebrew and Moabitic as תִּי, and in Aramaïc as תּ, also seems pretty certain, on account of the *general* resemblance[2] of the whole Æthiopic perfect to the same tense in the cognates, both in form and in prin-

[1] In Mr. Sayce's Principles of Comparative Philology, p. 87 (Trübner, 1874), will be found a letter embodying my views of the subject when the Hebrew forms, Jer. xxii. 23, had first suggested to me the idea of searching the cognates for illustrations of the Assyrian formation in *-ku*. The far more important Aramaïc analogies had not at that time presented themselves.

[2] The main peculiarity of the Æthiopic perfect is, that in all pronominal inflexions a ת is exchanged for a כ; but however this variation is to be accounted for, its absolute uniformity implies regularity.

ciples of formation; notwithstanding the change of temporal value from *dabsacu* 'I ripen,' to יְדַבֶּשְׁתִּי [1] 'I soften*ed*,' and the conversion of the Assyrian and Æthiopic palatal כ into the lingual ת of the other languages. Thus does Æthiopic become the link whereby, at this point, Assyrian passes into a chain of harmonious connexion with its kindred of a later generation.

IV.

But, further, have we nowhere in Semitic any parallel to this deliberate erection of a personal pronoun as subject of a verb together with a verbal base, into the semblance of a tense? *Anaku* is separable into the two elements *ana*+*ku*; the latter being, as we said, absent in the Aramaïc form of the pronoun. Yet that language in both its branches habitually constructs a present tense by the attachment of *anā* Chaldee, *eno* Syriac, as an afformative to the participle present. Schaaf,[2] Winer,[3] and Fürst,[4] in their Chaldee Grammars, give copious instances of the form קָטְלָנָא for קָטֵל+אֲנָא 'I (am) killing.' We have דְּכַרְנָא 'I remember,' שְׁלַחְנָא 'I send,' יְדַעְנָא 'I know,' etc., etc., and this formation was extended to the second person, as קָטְלַת for קָטֵל+אַתְּ 'thou (art) killing,' and included both genders and numbers, as well as the participles of all conjugations. Fürst even adds a Rabbinical form קָבְלְנִי=קָבֵל+אֲנִי; and in Biblical Hebrew, as Schaaf reminds us,

[1] The root דבשׁ, allied to טָפַשׁ, etc., is not in actual use in Hebrew. *Vide* Gesenius and Fürst *sub voc.*

[2] Opus Aramæum, pp. 334–336.

[3] Grammatik des Chaldaismus, 2te Aufl. p. 42.

[4] Chaldäische Grammatik, p. 119. Well worthy of observation are Fürst's remarks (note, p. 118) on the disappearance of this participial form from the more recent MSS. and the editions of the Targums, in consequence of its real character being forgotten and confounded with the perfect. In my own copy of Onkelos, יְדַעְנָא, corresponding to Hebrew יְדַעְתִּי, Gen. iv. 9, is pointed יְדַ; to the utter confusion of the sense, because the latter form is the first person *plural* of the perfect, and therefore the equivalent of Hebrew יָדַעְנוּ '*we* knew.' Fürst's Rabbinical example hardly looks genuine. Schaaf, however, has (p. 336) מְקוּבְלְנִי (sic) *cabbalizatus sum.* Rather ? *cabbalizor.* It is worth remarking that in יְלַדְתְּ and יְשַׁבְתִּי, Schaaf prints the Kholem full (וֹ), wherein he seems not to be borne out by the editions. Yet one would think that unless the word had stood ויולדת, the punctuators would hardly have felt compelled to treat it as other than a Perfect. מקננתי is the only instance which the מ preformative absolutely proves to be a participle.

we have words which the Masoretic punctuation treats as combinations of the participle with the second pers. sing. feminine. He instances Gen. xvi. 11, וְיֹלַדְתְּ 'et paries;' and in Jerem. xxii. 23, יֹשַׁבְתְּי 'quæ habitas tu,' and also מְקֻנַּנְתְּי 'quæ nidificata es tu;' omitting, I know not why, a third example in the same verse, נֵהַנְתְּי, participle Niphal of הָבַן (? 'quam miseranda es tu'); but adding Jer. li. 13, שֹׁכַנְתְּי 'quæ habitas tu.' But to return to Aramaïc, far more complete is the illustration from Syriac. In that language the classical Peshito version yields us, so far as verbal bases are concerned, *passim*, the form ܩܛܠܢܐ *qoṭel'no* for *qoṭel+eno* 'I (am) killing,' where the *linea occultans* causes a perfect fusion (as to sound) of the pronoun and participle into one word, which indeed, in some cases, can be written as such, *e.g.* first plural ܩܛܠܝܢܢ *qoṭlinan*, 'we (are) killing;' and the system comprehends all persons, even the third, as ܩܛܠ ܗܘ *qoṭel'u*, or ܩܛܠ ܗܘ *qoṭela'w*, 'he (is) killing,' etc., etc. *Dabsacu*, then, is fully represented by *qoṭelno*; but as regards bases other than verbal, the modes in which pronouns may be combined with them are various, and I must leave to the professed Syriast an exhaustive description of them. First, however, there seems no reason for supposing that a Syrian would have indulged in any such large and unrestrained use of *eno* united to a noun as we see when the Assyrian king flushes forth his egotism in a stream of eleven forms of *anaku* in conjunction with a braggart epithet or title. But (I.) in direct affirmations, the most common case of the subordination of *eno* to another word not a verb, and of semi-absorption by the same, is (*α*) where that word is *eno* itself repeated instead of the copula. Thus John x. 9, 'I (am) the door,' is ܐܢܐ ܐܢܐ ܬܪܥܐ *eno'no taryo*; *vide* also x. 11, and vi. 48, xi. 25, xv. 1, 5. However, (*β*) the second *eno* may be understood; and then the pronoun stands singly and entire, as J. i. 23, where 'I (am) the voice' is ܐܢܐ ܩܠܐ *eno qolo*. But (II.) in *oratio obliqua*, whether *eno* be used once or twice, the combination may take place at the end of the word or words which constitute the predicate, as (*γ*) in I. Cor. i. 12, a passage which is worth quoting at length—

ܗܕܐ ܕܝܢ ܐܡܪ ܐܢܐ . ܕܐܝܬ ܡܢܟܘܢ ܕܐܡܪ . ܐܢܐ ܕܦܘܠܘܣ ܐܢܐ

hode den omar'no, dith menkun domar, "eno d'pawlos' no:" 'This,

then, I (am) saying, that there is of you who (is) saying, "I of Paul I:"' where we see *eno* first, after the model of *qoṭelno*, subordinated to a participle and half-absorbed into it, in *omar'no*; and secondly, affected in the same way by the word *d'pawlos*, as it also is thrice again by the three other proper names which follow in the sentence. Here, therefore, begins the resemblance to the Assyrian in the union of the first person with quasi-substantival bases; but (δ) J. xix. 21, we have it carried out to a perfect analogy. 'Write not that he (is) king (ܘܠܐ ܡܠܟܐ, *d'malka'w*, for *malko+hu*), etc., but that he said that I (am) king, etc.' (ܕܗܘ ܐܡܪ ܐܢܐ ܡܠܟܐ ܗܘܝܬ *d'hu emar d'malko'no*), where not only do we see a substantive combining with itself a pronoun of the third person in *malka'w*, but between *malko'no* =(*malko+eno*) and the Assyrian *sarraku* =(*sarru+anaku*) the sole difference is, that in one the former, in the other the latter, element of the original *ana+ku* is taken as afformative with the noun signifying 'king.' Here, then, we finally arrive at all that we sought.

V.

To revert now to Dr. Hincks's "Permansive." Besides his *paglaku, -k*, he does not pretend to produce any instances except of third persons; and these I decline to discuss; because the indications of them, if real, are very far from distinct, and their origin, whatever it be, is not explicable on the ground of conscious attachment of a pronominal fragment as an afformative. Of the first plural and the second persons it will be time to speak when any specimens of them put in an appearance; and with respect to Hincks's rashness in venturing on their "restoration," I must concur in the opinion of his foreign critics.[1] But as to the true designation of these forms in *-ku*, I am not so much concerned to find one for them as to define their true character; and will therefore only suggest that we stamp them with the same name that their Syriac analogues in *-no* receive whenever one specially appropriate shall be minted for these. *Sarraku* and *malkono* of course we strike out of the category of verbal forms, and *dabsacu*, which we admit among them, we may name just what

[1] Oppert's Préf. p. xx.; Schrader, p. 391.

the grammarians would term *qoṭelno*. One might rather regard the Syriac formation, at the head of which stands *qoṭelno*, as a tense in embryo, than a tense fairly born into the world; yet, I little doubt that *dabsacu* is to the Hebrew דָּבַשְׁתִּי just what the fœtus is to the infant; *i.e.* they differ only as to stages of form and power, but constitute one identity. *Dabsacu* is the prime member of that which afterwards became the Semitic perfect; the afformative being preserved without change in Æthiopic alone, while the temporal value the whole tense ultimately acquired was merely conventional and by no means inherent.

Our conclusions are suggestive of thoughts not uninteresting to the student of mind and of language. We are admitted, as it were, to attend upon the genesis of a tense. The recent Aramaïc formation unveils to us the primitive Assyrian process, whereby in the early Semitic period, the form of the perfect was originated, though as yet unendowed with its peculiar powers. Then in later days the newer language, in want of a present, revives the archaic expedient of tense-making by means of pronominal afformatives consciously affixed. Again, how slowly the distinctions of time were evolved in the Semitic mind we discern in the absence[1] of any definite past tense in the oldest Semitic language. And how far inward conceptions may lag behind outward development, we learn from the fact that the Assyrian, with his high proficiency in Science, mechanical and military, and his great attainments in Art, pictorial and scriptorial, left posterity to elaborate the distinction between history and prophecy.

[1] Nor does it diminish our surprise at this defect, when we discover that Mesha, whose epoch lies within the Assyrian period, well knew, as early as the ninth century B.C., how to say מלכתי, Inscript. l. 2 and 3, 'I reigned;' בנתי, 21, etc., 'I builded;' עשתי, 23, etc., 'I constructed;' כרתי, 25, 'I digged;' יסבתי, 29, 'I collected.' (Nöldeke, die Inschrift des Königs Mesa, etc., Kiel, 1870.) Hence Mr. H. Fox Talbot's statement (Records of the Past, vol. i. p. 6) respecting the substantial identity of the inscribed Babylonian language all through the thousand years' interval between Khammurabi and Nebuchadnezzar, raises the suspicion that latterly its forms may have been those rather of an archaic monumental language than of a living and spoken one. Still this does not destroy the fact, that in the earliest inscriptions wherein this defect is observable, Assyrio-Babylonian culture and civilization already stand very high.

ON THE MEDIAN DYNASTY;

ITS NATIONALITY AND ITS CHRONOLOGY.

By Professor JULIUS OPPERT.

The Persian kings wrote their architectural documents in three languages and three distinct kinds of writing, the first of which is the Old Persian, and the third the Assyrian. The second kind had been called formerly by Rawlinson, Westergaard, and De Saulcy Median; but, as this language is clearly a Turanian one, and as the known geographical names of Media are almost all Aryan, I proposed, already in 1851, to call that kind of scriptures Scythic, and this name was adopted by Norris and Spiegel. I must confess that this denomination was erroneous, and I am now able to prove that this second kind of writing represented actually the language of the second great dynasty of Asia, called Median by the ancient writers. Herodotus (vii. 62) states that the Medes were called formerly Arioi, and they adopted afterwards the latter name. As Mada is itself the Sumerian word signifying land, this change of name coincided exactly with a Turanian invasion. The Turanian name became a geographical one, in spite of all Aryans inhabiting the soil, and who caused the Aryan name to survive the intruded one; to-day the land has recovered the old name of Iran.

Many reasons can be given to prove that, geographically, the second kind of the trilingual inscriptions was that of Media. Some scholars believed the language to be the Elamite or Susian. We have the inscriptions of Susiana, for which we are indebted to the British explorer, W. Kenneth Loftus. The name Elamite is badly chosen for these texts, as the term would point out rather a Semitic tongue; on

the contrary, the language of the Susian inscriptions is of the same family as the Median, but by no means identical, and offers a good deal of distinct flexions and words. The Medians call Susiana (the Persian *Uvaźa*, the Assyrian *Elamti*) *Hapirtip* or *Habirdip*; the sagacity of Edwin Norris pointed out the identity of the name with the *Amardi* of the Greeks, who inhabited the northern part of the Susian land in proximity to Media. The same word is to be found in the Susian inscriptions, but it is quoted as a part of Susiana; the texts of Susa quote *Habirdip*, accompanied by *Huśśi* (*Uvaźa*, *Khozistan*), *Kussi* (the *Kosseans* of the Greeks), *Nimē* (the *Nimma* of the Assyrian texts), all names of parties in Susiana; the Semitic name of Elam is the only one wanting.

In the Susian texts the rivers Tigris and Euphrates are quoted as *Tiklat* and *Purat*; as well-known streams, they had their own names in this language. The Medians, dwelling far from these rivers, were obliged to take these denominations from the neighbouring nations, and gave to them the sound of *Tigra* and *Ufrato*, as did the Persians. The seat of the people that spoke the second kind of the trilingual idioms inhabited a region distant from Mesopotamia.

But this nation was near to Assyria, the Median name of which is, except that of Persia (*Parsan*), the only geographical term taking the Median termination *an*; Assyria is called *Assuran*. Moreover, the Egyptians had their own Median name, that of *Muzzariyap*, which is not a transcription of the Persian *Mudraya*, but denotes that the nation had direct intercourse with the Nile regions, and that these connexions took place by the way of the Semitic Assyria, where Egypt was called *Muzur*.

The northern Scyths have the name of *Sakka*, which the Persians borrowed from the Medians, who did not employ the Assyrian denomination of *Gimirri* or *Gomer*, the Cimmerians of Herodotus.

The Median metropolis Rhagae is not quoted in the Median text as "a city of Media," as that is the case in the Persian and Assyrian texts; but the Median translation names it merely *Raggan* (with the characteristic *an*), without any further indication, as are quoted Babylon, Ecbatana, Arbela, and Pasargada (*Paisiyāuvādā* in Persian).

Because the inhabitants of Media bore formerly the name of *Arioi*, the true Medians are the only people who distinguish in their texts Ormazd as the "god of the Arians," even with the Aryan

genitive form *Arriyanam*, in order to show the distinction between the Ariya and the Mada inhabiting the same soil, according to Herodotus.

Media itself is named *Mada* and *Madape*, the Medias, the lands. And this name of *Mada* is the single one which does not take for the derivative terms the syllable *rra*. A Persian, an Armenian, or Babylonian, are, among others, translated by *Parsarra*, *Armimiyarra*, *Babilurra*; we even read *Habirdirra*, a Susian; a Median is called *Mada*, and not *Madarra*, and this is the single case of this kind. In the idea of the men who wrote the inscription of Behistun, the Medians were a people, and the land had gotten its name from the Turanian conquerors.

Common sense compels us to admit that the language placed between the Persian and the Assyrian, and before the last, must have been the idiom of a great and powerful nation, of some important people and dynasty. In fact, it was the language of the second great empire of Asia, of the kings of the so-called Median dynasty.

The names of these kings have been transmitted to us in two distinct lists, and in each there are quite different names; one is the list of Herodotus, the other that of Ctesias. We are not allowed to eliminate historical statements without examination; unfortunately, modern science is often addicted to this method of criticism; but, in fact, this method is highly uncritical. It is, indeed, easier to reject what we do not understand, than to understand what we ought not to reject. The two lists represent the same individuals, at least for the four latter kings transmitted by Herodotus.

The names given by Herodotus are the Turanian names of the monarchs, aryanized by the Aryan Medes; viz. Dejoces, Phraortes, Cyaxares, Astyages (or Astiÿges). These forms have, in the Aryan language, a meaning quite different from the Median original: the names given by Ctesias, followed by Diodorus, Eusebius, and Moses of Chorene, are the mere translation of the original Median meaning, in Persian or Arian language; viz. Artaeus, Artynes, Astibaras, Astyages.

This is the rule for the four latter names. Diodorus gives five former kings, who have been reduced to three by almost all scholars. These five names are Arbaces, Modaces, Sosarmus, Artycas, and Arbianes. The two latter kings are evidently different Turanian names of Dejoces and Phraortes; Arbaces is a Median word signify-

ing the first, the foregoing; Modaces and Sosarmus have not yet been explained. Here follows the explanatory figures:

Median name, with signification.	Aryanization, with signification.	Aryan translation of the Median meaning.
Arbek, the foregoing	*Arbaka* (*Maudaces*) (*Sosarmus*)	
Hartaukku, establisher of law	*Artuka* (Artycas)	
Varbiyanna, assembling of all (nations)	*Haruviyana* (Arbianes)	
Dayaukku, establisher of law	*Dāhyuka* (Dejoces)	*Artayu* (Artaeus)
Pirruvarti, assembler of all (nations)	*Fravartis* (Phraortes)	*Harwīna* (Artynes)[1]
Vak-istarra, lance-bearer	*Uvakshatara*, having good mules (Cyaxares)	*Arstibarà* (Astibara)
Arse-uggi, having good soldiers	*Arstiyuga*, combating with lances (Astiyges)	*Uçpāda* (Aspadas)

The fact of the aryanization of Susian names is proved by the Behistun inscriptions. There occur the following names:

Original Susian.	Aryanization.
Assina	*Athrina*
Humbadarāva	*Upadarma*
Issaïnsakri	*Çiñçikhri.*

The Susian originals are guaranteed by the Median text; moreover, *Umbadarā* is quoted in the Asurbanhabal inscriptions as a Susian, and *issan* and *sakri* are also Susian words, existing in the texts of Sutruk-Nakhuntē, "mighty ruler of the plain of Susunqu."

With respect to the Median Kings of Diodorus, it is possible, also, that *Artycas* and *Arbianes* are merely other Persian forms for *Artaeus*, as may be the case with the perhaps corrupt *Artynes*.

The canon of the Median Kings, quite in conformity with M. de Saulcy's statements, runs as follows:

	B.C.	B.C.
Arbaces	788	760
Maudaces	760	740
Sosarmus	740	710
Dejoces (Artycas, Artaeus)...	710	657
Phraortes (Arbianes, Artynes)	657	635
Cyaxares (Astibaras)	635	595
Astyages (Aspadas)	595	560

[1] Perhaps Aryïnes, the same as *Arbianes*.

These are just the 228 years which Herodotus (i. 130) accords to the Median Kings' reigns since their liberation from the Assyrian yoke.

The two dynasties of Media and Persia were quite distinct in nationality and religion. The accession of the Achaemenides with Cyrus marks the victory of the Aryan and of the Zoroastrian faith.

A century before that epoch, the last independent king of Persia, and the sixth of his family, Achaemenes, had been superseded by the Mede Phraortes.

GRAMMAR OF THE MEDIAN LANGUAGE.

All *Median* scholars are greatly indebted to the grammatical outlines of Norris, whose conscientious labours in this new science cannot be overrated. Nevertheless, many points have not been elucidated by him, and notably the Median conjugation.

We will not insist upon the modifications to be introduced in the decipherment of the characters; we will not explain the declensions and suffixes; these are to be exposed in a larger work. Here follows only the conjugation of the Median regular verbs.

The regular verbs are in some instances monosyllabic, very few derived are trisyllabic; the great majority of them are dissyllabic, finishing in *a*, *i*, or *e*, *u* or *o*. Ex. *hutta*, to do; *vaggi*, to bear, to bring, to send; *vite*, to go; *rilu*, to write; *appanto*, to sin.

The conjugation is either active or neuter. The latter of these forms is that of passives.

The primitive form is to be found in the shortened first person of the historical preterite tense; for example:

hutta, I made;
vaggi or *vaggiya*, I brought;
tite or *titeya*, I lied;
kidu or *kiduva*, I pulled out;
appanto or *appantova*, I sinned.

All personal terminations can be proved, except that of the second plural person. We have only the imperative mood of this person; in the other instances it has been supplied by analogy.

The preterite tense forms with the addition of *ta* or *ti* the pluperfect or imperfect; with *ra*, the indefinite preterite; with *nē*, the precative mood.

We choose for paradigm the verb in *i, kuti,* to bring.

ACTIVE VERB OF THE RADICAL FORM.

PRETERITE.

Sing. 1 p. *kutiya* or *kuti,* I brought
2 p. *kutiki*
3 p. *kutis*
Plur. 1 p. *kutiyut*
2 p. *kutikip*
3 p. *kutiyas* or *kutis*

PLUPERFECT OR IMPERFECT.

Sing. 1 p. *kutita* or *kutiti,* I had brought
2 p. *kutikita*
3 p. *kutista*
Plur. 1 p. *kutiyutta*
2 p. *kutikipta*
3 p. *kutiyasta* or *kutista*

INDEFINITE TENSE.

Sing. 1 p. *kutira,* I have brought
2 p. *kutikira*
3 p. *kutisra*
Plur. 1 p. *kutiyutra*
2 p. *kutikipra*
3 p. *kutiyasra* (*kutisra*)

PRECATIVE MOOD.

Sing. 1 p. *kutinē,* may I bring
2 p. *kutikinē,* mayst thou bring, imperative
3 p. *kutisnē*
Plur. 1 p. *kutiyutnē*
2 p. *kutikipnē*
3 p. *kutiyasnē* (*kutisnē*)

PRESENT TENSE.

Sing. 1 p. *kutivañ* or *kutivara,* I bring
2 p. *kutivainti*
3 p. *kutivanra* (*kutivan*)
Plur. 1 p. *kutivaniun*
2 p. *kutivaintip*
3 p. *kutivampi*

FUTURE TENSE.

Sing. 1 p. *kutiñ,* I shall bring
2 p. *kutinti*
3 p. *kutinra*
Plur. 1 p. *kutiniun*
2 p. *kutintip*
3 p. *kutimpi*

IMPERATIVE.

Sing. 2 p. *kutis*, bring thou
Plur. 2 p. *kutis*, bring ye

INFINITIVE.

kutivana, to bring

GERUNDIVE.

kutivanra, in order to bring.

PASSIVE CONJUGATION.

Flexion of the Neuter Verbs.

PRETERITE.

Sing. 1 p. *kutigit*, I was brought
2 p. *kutikti*
3 p. *kutik* (*kutikka*, *kutika*)
Plur. 1 p. *kutigiyut*
2 p. *kutiktip*
3 p. *kutip*, *kuttippi*, *kutippa*, perhaps instead of *kutikpē*

PLUPERFECT OR IMPERFECT.

Sing. 1 p. *kutigitta*, or *ti*, I had been brought
2 p. *kutiktita*
3 p. *kutikta*
Plur. 1 p. *kutigiyutta*
2 p. *kutiktipta*
3 p. *kutippa*, *kutippiba*

INDEFINITE TENSE.

Sing. 1 p. *kutigitra*, I have been brought
2 p. *kutiktira*
3 p. *kutikra*
Plur. 1 p. *kutigiyutra*
2 p. *kutiktipra*
3 p. *kutipra*, *kutippira*

PRECATIVE MOOD.

Sing. 1 p. *kutigitnē*, may I be brought
2 p. *kutiktinē*
3 p. *kutiknē*
Plur. 1 p. *kutigiyutnē*
2 p. *kutiktipnē*
3 p. *kutipnē*

PRESENT TENSE.

Sing. 1 p. *kutivagit*, I am brought
2 p. *kutivakti*
3 p. *kutivak*
Plur. 1 p. *kutivagiyut*
2 p. *kutivaktip*
3 p. *kutivap*, *kutivappi*, *kutivappa*

IMPERATIVE (neuter verb).

Sing. 2 p. *kuti*, be thou brought
Plur. 2 p. *kuti*, be ye brought

PARTICIPLE.

Sing. *kutik*, *kutika*, brought
Plur. *kutip*, brought

Derived Verbs.

Causal Form.

Kutina, to cause to bring (conjugated like a regular verb in *a*).

ACTIVE PRETERITE.

Sing. 1 p. *kutina*, I caused to bring
2 p. *kutinaki*
3 p. *kutinas*
Plur. 1 p. *kutinayut*
2 p. *kutinakip*
3 p. *kutinavas* (*kutinas*)

PLUPERFECT.

Sing. 1 p. *kutinata*, I had caused to bring

INDEFINITE PRETERITE.

Sing. 1 p. *kutinara*, I caused to bring

PRECATIVE MOOD.

Sing. 1 p. *kutinanē*, may I cause to bring

PRESENT TENSE.

Sing. 1 p. *kutinavañ*, *kutinavara*, I cause to bring

FUTURE TENSE.

Sing. 1 p. *kutinañ*, I shall cause to bring
2 p. *kutinainti*
3 p. *kutinanra*
Plur. 1 p. *kutinaniun*
2 p. *kutinaintip*
3 p. *kutinampi*

IMPERATIVE.

Sing. 2 p. *kutinas*, cause to bring

INFINITIVE.

kutinavana, to cause to bring

GERUNDIVE.

kutinanra, in order to cause to bring

Passive of the Causal Form.

PASSIVE PRETERITE.

Sing. 1 p. *kutinagit*, I have caused to bring

PLUPERFECT.

Sing. 1 p. *kutinagitta*, I had been caused to bring

INDEFINITE.

Sing. 1 p. *kutinagitra*, I have been caused to bring

PRECATIVE MOOD.

Sing. 1 p. *kutinagitnē*, may I be caused to bring

PRESENT TENSE.

Sing. 1 p. *kutinavagit*, I am caused to bring

IMPERATIVE.

Sing. 2 p. *kutina*, be thou caused to bring

PARTICIPLE.

kutinak, *kutinaka*

Intensive Form.

Kut(i)katorra, to bring forth (conjugated like *kutina*, the causal).

Desederative Form of the Simple Verb.

Kutiniunyu, to will bring (conjugated like a neuter verb).

PRETERITE.

Sing. 1 p. *kutiniunyugit*, I would bring
2 p. *kutiniunyukti*
3 p. *kutiniunyuk*
Plur. 1 p. *kutiniunyugiyut*
2 p. *kutiniunyuktip*
3 p. *kutiniunyup*, *kutiniunyuppi* (*a*)

PLUPERFECT.

Sing. 1 p. *kutiniunyugitta*, I had had the intention to bring

INDEFINITE.

Sing. 1 p. *kutiniunyugitra*, I have had the intention to bring

PRECATIVE MOOD.

Sing. 1 p. *kutiniunyugitnē*, may I have the intention to bring

PRESENT.

Sing. 1 p. *kutiniunuvagit*, I will bring

IMPERATIVE.

Sing. 2 p. *kutiniunyu*, will thou bring

Derivative Form of the Causal.

Kutinaniunyu, to have the intention to cause to bring.

Reciprocal Form.

Kutivanlu, to bring to each other (conjugated like a neuter verb).

PRETERITE.

Sing. 1 p. *kutivanlugit*, I brought another
2 p. *kutivanlukti*
3 p. *kutivanluk*
Plur. 1 p. *kutivanlugiyut*
2 p. *kutivanluktip*
3 p. *kutivanlup*

PLUPERFECT.

Sing. 1 p. *kutivanlugitta*, I had brought another

INDEFINITE.

Sing. 1 p. *kutivanlugitra*, I have brought another

PRECATIVE MOOD.

Sing. 1 p. *kutivanlugitnē*, may I bring another

PRESENT.

Sing. 1 p. *kutivanluvagit*, I bring another

IMPERATIVE.

Sing. 2 p. *kutivanlu*, bring another

Reciprocal Form of the Causal.

Kutinavanlu, to cause to bring each other.

There are most certainly existing other forms, that are not transmitted to us by the texts.

The neuter verbs are conjugated as the passives.

Several verbs are irregular, and of another conjugation; for instance, *gin*, to be; *nan*, to say.

gini, I am.	*nangi*, I say.
ginta	*nainta*
ginri	*nanri*
giniyut?	*nangiyut*
gintip	*naintip*
ginripi	*nanripi*

There existed also a neuter form of the verb *gin:*

ginnigit	*ginnigiyut*
ginnikti	*ginniktip*
ginrik	*ginrip*

The substantive verb is *da* and *du*. *Duva* or *dava*, I was; *dus* or *das*, he was; *duvan* or *davan*, I am.

The Median language has a much greater affinity to the Tatar idioms than the Sumerian;[1] but it forms a separate class together with the Susian. I have, for twenty years, paid attention to these most difficult texts, and there are a great number of passages now easily to be understood by the aid of our scanty Median knowledge. My explanations have been laid down in a paper addressed to the first Congress of Orientalists held at Paris (vol. ii. p. 179 ss.).

Unfortunately many Median important words, as the numerals, and many substantive nouns, are only written in ideograms. The phonetic values of two or three only of these are known: these are *unan*, king; *umman*, house, family.

[1] This is the true name of the original Anarian tongue. The false name of Accadian, for which *no reason has ever been put forth*, must be abandoned. The language of Accad is the Semitic Assyrian idiom. The proof of this scientific truth is to be found in my paper, *Etudes Sumériennes*, first article in the *Journal Asiatique*, *Février*, *Mars*, *Avril*, 1875. The arguments I suggest in order to support this opinion are, I believe, irrefutable.

RESTORATION OF THE BEROSUS CANON

By Professor JULIUS OPPERT.

I shall concisely unfold my discoveries in Babylonian chronology, which fix, in an undeniable way, and in accordance with the highly valuable statement made by Mr. George Smith, the commencement of the historical times of Babylon at 2517 B.C. The Chaldæans knew the period of 1805 years, or 22,325 synodical months, equal to 24,227 draconitic months, after which the eclipses return in the same order. This period is quoted in the texts of Sargon, who states its end in 712 B.C.[1] Prof. Schrader, in his reply to my views, confessed this point to be *unattackable*.

The date of 2517 B.C. as the date of the Aryan conquest stated by Berosus is confirmed by the famous list of the same author, combined

[1] The passage runs as follows:

ultu yume rukuti adi igidti Sin
inde a diebus remotis usque ad nodiperiodum Luni.

This translation is supported by almost all Assyriologists, as MM. Menant, Lenormant, Delitzsch, Schrader, Eneberg, and other scholars. It agrees with the clause in the mutilated stele of Larnaca now at Berlin, which can be easily restored:

[*ultu*] *yumē rukuti Sibit* (mat) *Assur*
inde a diebus remotis fundationis Assyriae,
[*adi muan*] *na*
usque ad hunc annum.

Traces of the *an* in the second line are still visible on the stone. The first passage is one of the most intelligible: *ultu* from, and *adi* until to, are the well-known correlatives; *igidti* is expressed by I, as in the syllabaries; and *Sin* is written AN. SIS. KI, as in the Zürich bilingual tablet, and Norris's *Dict.* p. 938. No one has understood *until now*, the king *Until*, who Mr. Smith now finds in the clause where he formerly discovered Arabian tribes.

with some valuable information given by Herodotus. The real figures of the Berosian dynastic canon are thus handed down in the Armenian text of Eusebius:—

Medes	234 years.[1]
Elamites	224 ,,
Chaldæans	458 ,,
Arabians	245 ,,
Semiramis	42 ,,
Assyrians	526 ,,
Duration of the Median Empire (*Herod.* i. 130)	228 ,,
	1957

These 1957 years, added to 560 B.C., the date of the end of the Median empire, will give exactly 2517 B.C. for the date of the Aryan invasion. The statement is corroborated by the cuneiform inscriptions. As the capture of Susa took place in 648 B.C., the capture of Babylon by the Elamites, and the accession of this dynasty 1635 years before, falls in the year 2283 B.C., which date, added to 234 of the first dynasty, equally leads us to 2517 B.C.

The canon of Berosus, restored only so far as it was applicable to Babylon, runs thus:—

	B.C.	B.C.
Medians	2517—	2283
Elamites	2283—	2059
Chaldæans	2059—	1601
Arabians	1601—	1356
Semiramis	1356—	1314
Assyrians	1314—	788
Phul, the Chaldæan	788—	(?)

[1] There is not a single number invented or changed. The corrupt Armenian text gives for the Median dynasty two numbers, 234 and 224; for the second, not named, the number is wanting in the text; but a marginal note gives 48. This 48 is only 2·24 misunderstood. The reign of Semiramis is not stated. All the ancient documents give 42 years. It is easy to change numbers, but more difficult to explain those which exist. The two numbers, 234 and 224, were believed to be identical, on account of their almost equal value. It is possible that the number 224, *now well confirmed*, was rejected by the compiler, on account of the curious coincidence that the first two dynasties according to this computation together lasted 458 years, which is the same number of years as the third dynasty itself lasted. But these coinci-

This date of 788 B.C., established by M. de Saulcy, for the definitive accession of Phul and Arbaces,[1] is clearly confirmed by the eponymous list, which gives for the last annual officer of Assurnirar 792 B.C., three years before the downfall of Ninive. This is, moreover, the only date possible that will agree with the Solar eclipse of the 13th of June, 809 B.C., and the sole date reconcilable with the unimpugnable testimony of Biblical history.

I regret that I cannot now explain that the scanty Assyrian chronological texts can neither be understood nor interpreted without the aid of the historical texts of the Kings, and that all chronology neglecting or disdaining these statements will be overthrown.

Diodorus (ii. 32) states that the Chaldæans admitted from the oldest time until Alexander, a period of more than 473,000 years to have elapsed. As the antediluvian times fill up 432,000, they admitted 41,000 years from the Deluge to Alexander. Berosus gives to the two first fabulous kings 5100, and to the other monarchs of the mythical period 34,080,[2] together 39,180 years. From 2517 B.C. to Alexander 330 B.C. are 2187 years; in all 473,367 years. But how can the evidently cyclical number of 39,180 years be explained?

As the Babylonians knew the period of the moon, they did not ignore the so-called Sothiac period, in which time the commencement of the year of 365 days turns backwards through all seasons. This period is known to be of 1461 short, or 1460 (4×365) Julian years.

dences abound in history. The Roman Republic and the Parthian Empire both had a duration of the Salomonian number of 480 years. The three Prussian princes, the Grand Elector, Frederick I., Frederick William I., reigned together 100 years, as did their immediate successors Frederick II., Frederick William II., and Frederick William III. And in Berlin there is certainly neither myth nor cycle.

[1] *Arbaka*, not easily explainable by any Iranian language, is an aryanization of the Median *erbek*, the first, the foregoing. With regard to Phul, some scholars have had the idea of identifying him with Tiglathpileser. This opinion is rejected by all testimonies; and it is only supported by the axiom that all Biblical statements must be wrong. Nevertheless, there are a great many Biblical statements which are *true*; they are consistent with themselves, and repose on a historical chronology. It can be shown, by mathematical demonstration, that there existed a real *era* from the Solomonian temple, connected traditionally with a presumed date of the Exodus. This unavoidable supposition of a fixed era explains the whole actually historical epoch of the king's synchronisms.

[2] In the corrupt text of the Armenian, as it is now, the 5100 years are confounded with the 34,080 years. But it can easily be shown that this 5100 years are necessary to make out the 473,000 years. Moreover, there ought to be the statement of the remaining pretended 28,980 years, which is wanting.

Now, the number of 39,180 years, attributed to the first postdiluvian heroic dynasty, is nothing else but

12 Sothiac periods of 1460 = 17,520
12 Lunar periods of 1805 = 21,660

39,180 years.

Moreover, the Egyptian Sothiac period finishes in 139. In counting backwards we arrive to the dates of 1322, 2782, 4242, 5702, 7162, 8622, 10,082, 11,542 B.C. Searching the Chaldæan lunar periods retrospectively, they give the following dates: 712, 2517 B.C., and for the mythical time 4322, 6127, 7932, 9737, 11,542 B.C.

This marvellous coincidence is not a mere hazard. I have neither invented nor changed a single number. The chronology of Berosus is therefore restored. The Babylonians placed the Deluge in the year 41,697 B.C.

In all cases the reader can take for granted that the date of 11,512 B.C. reposes on a real historical tradition, and that the two periods, the Chaldæan moon period and the Sothiac period (whether it was Egyptian or not), have the same origin. By mathematical calculation I have been enabled to fix the date of a double phenomenon which struck the sight of men, consisting in an eclipse, and in an apparition of Sirius[1] visible only during this eclipse, on Tuesday,

[1] The latitude of Sirius is austral 39° 28′, and as it was in 1000 A.D. it approached to its nearest point to the equator, the epoch of 11,542 B.C. coincides almost with its most southern possible position, viz. 62° 30′ austral declension. The star was therefore invisible to all regions more northern than 27° 30′ L.B. Thebes is situated at 25° 42′ boreal latitude. Sirius at this time rose only 1° 48′ over the horizon; it may be, in consequence, regarded as almost invisible in the morning or the night, on account of the fog which darkens the horizon in those climates. We obtain the half arc ϵ of the parallel circle described by the astre in admitting its declension (δ), the latitude of the spot (λ), by the equation:

$$\cos \epsilon = \mathrm{tg}\ \delta\ \mathrm{tg}\ \lambda.$$

The arc ϵ will be in this instance 22° 24′, and Sirius remained only 3 hours over the horizon of Thebes. But as the longitude l of the sun on the 28th of January was 307°, in quoting w the obliquity of the ecliptic at this epoch, the right ascension (a) of the sun will be given by the figure:

$$\cot a = \cot l \cos w.$$

We obtain therefore the right ascension of the sun 309° 6′. That of Sirius being then almost 274°, we find that the astre remained in the sky from 8h. 15m. until 11h. 15m. in this date. It is highly probable that during this time the eclipse took place, which rendered the sudden apparition of Sirius perceptible to men. These

27th of April, Julian, or the 28th of January, Gregorian. But as at this epoch Sirius was not visible to Northern or Middle Egypt, on account of the equinoctial precession, civilization must start from a more southern point.

considerations exclude also a more southern spot than Thebes. We may therefore suppose that Thebes, or any place in the neighbourhood, was already, in these remotest epochs, one of the cradles of human civilization. All the calculations concerning this matter are contained in a larger work which soon, I hope, will appear.

ON A CASE OF

SINGULAR LITERARY FORGERY.

By Professor JULIUS OPPERT.

All chronologists formerly admitted, upon the authority of Simplicius, in his commentary on Aristotle *de coelo*, that Callisthenes sent to Aristotle the Babylonian observations during 1903 years, viz. from the beginning of Babylonian history. This number of 1903 has been employed by Prof. von Gutschmidt in a system of chronology in which this scholar attempted to show that the real system of the Chaldæans consisted merely in the supposition that between the Deluge and Cyrus 36,000 years were elapsed. But the number itself is a forgery of the Latin translation of Simplicius made by the Aldi, and the original number is not 1903, but 31,000 years.[1] It can be proved that the erroneous opinion of Prof. von Gutschmidt is much older than this scholar, and comes perhaps from the middle ages; it is based on the 45th chapter of Isaiah. The pious substitution of 1903 for 31,000 results from the opinion that Cyrus began a new era for the Babylonians, which the documents prove to be quite inadmissible. Cyrus was a Babylonian king of Babylon, as Cambyses was an Egyptian king of Egypt.

Here is the arithmetical proof: Admit that from the Deluge to Cyrus there are 36,000 years, there will be 36,208 from the Deluge to Alexander (538—330=208). Then the corrupt text of Syncellus

[1] M. Martin (de Rennes) has already pointed out this fact. It is highly probable that the true number was 41,000, and that this famous statement is nothing else but that of Berosus and Diodorus (473,000—432,000).

assigns 34,090 years to the mythical period, and 215 from thence to Semiramis; that is, 34,305 years from the Deluge to Semiramis. Now the difference of 36,208 and 34,305, or the time elapsed between Semiramis and Alexander, is just 1903 years. We discover hereby the origin of this substituted number. Moreover this number has merely been obtained by the previous hypothesis, that from the Deluge down to Cyrus there was an interval of 36,000 years. It is impossible, in consequence, to deny that the idea of Prof. Gutschmidt existed in the time of the Aldi; but, also, the forgery overthrows his system.

I have furnished the proofs on which I found my chronological ideas in a work called Palaea.

THE TURANIAN SECTION.

ADDRESS

BY

SIR WALTER ELLIOT, K.C.S.I., PRESIDENT.

[This Address was prepared in the expectation that the Section would meet daily during the week, after the manner of the British Association. But as the arrangements adopted only allowed of a single *seance*, it was judged advisable to forego its delivery altogether; and, after a few prefatory observations, to request the authors of the several original papers to state the substance of them shortly, *viva voce*, and to limit each person taking part in the discussions to a space of ten minutes.]

IN opening the Turanian Section, it may be well to define the limits of a term that has been recently introduced, and the propriety of which has been questioned. I have been asked repeatedly what it signifies? To which I have replied, that originally it meant merely the countries bordering on ancient Persia. To the Aryan dweller in that country whatever was not Irán was Turán, and all foreigners were to him Turiyán or Turánis. But, virtually, the terms were restricted to the people on the northern and eastern borders of Persia, the Scythians or Sacæ of the Greeks, then, as now, remarkable for their nomade and equestrian habits. In the Aryan dialects *tura* signifies swift, *turaga* a horse. Hence, from the plundering incursions of these horsemen, in which they swept off everything portable, slaves, cattle, valuables, they came to be designated Turushkáh, a name still recognized in their Turkmán descendants, whose noble breed of horses, equal to the Arab in blood, but superior in size, enables them to execute those wonderful *chapus* for which they are still famous. Properly speaking, therefore, the term Turanian should

be confined to modern Tartary; but the Chevalier Bunsen, in a Report on the "Results of Egyptian Researches, with reference to Asiatic and African Ethnology," presented to the British Association at Oxford in 1847, proposed to include under this designation all the languages of Europe and Asia which are neither Semitic nor Aryan. In that sense it has been accepted by subsequent writers, and so it is now adopted in like manner by the organizers of the Congress.

Thus extended, the Section is found to include a great variety of peoples and tongues, exhibiting considerable diversity both of feature and speech. The former have been classed by ethnologists under two of the great divisions of the human family. The latter do not admit of so simple a limitation. The great number and variety of dialects form, it is true, several well-defined groups; but these, again, do not, at first sight, appear reducible to a common standard. Nevertheless, philologists think they have found an attribute, running through all, which links them together as members of one great family, whilst it separates them unmistakeably from the Aryan and Semitic tongues.

This characteristic has received the name of *agglutination*, and consists in the addition of particles as prefixes or suffixes, to mark inflections of person, number, tense, case,—of conjugation or declension, etc.,—which increments are never, as in other languages, absorbed or lost in the altered form of the word to which they are conjoined; but are simply affixed, or glued on as it were, to the root, and at once separable from it.

To account for such a peculiarity, it has been suggested that the conditions of a nomade life, to which so many of the Turanian peoples are addicted, render it necessary for distant tribes to communicate when they meet; and it is further argued that their restless habits are inimical to the growth of a more refined and artificial grammatical system. But it is to be observed, on the other hand, that the same habits have prevailed from the earliest times in Mesopotamia, Syria, and Arabia, without exciting any such influence on the Semitic dialects; and wherever a Turanian people have found a permanent resting place, as in India, China, Hungary, etc., they have cultivated their language, and produced a copious literature, without losing this feature of the family likeness.

In assigning the Turanian nations to two principal varieties of the human race, I follow the arrangement proposed by Professor

Huxley in 1872, not as being the latest, but as being the one that best commends itself to my judgment.

Looking from the standpoint of a biologist, at physical characters only, without reference to language or history, he finds one of the best-marked types of mankind in the indigenous population of Australia. Out of that region, the same characters are presented in a well-defined form by the Hill tribes of Central India, and in a somewhat modified shape by the ancient inhabitants of Egypt, and their Coptic descendants. The Professor cites, in support of his view, the examples presented among the crew of a recently returned Indiaman, who, however, have little connexion with the mountaineers of the Dekhan; but any one familiar with the Hindu population of Southern India must see how remarkably it partakes of the same type, modified on the coast and in the open country by commixture with other races, and traceable more or less as far as the Himalayas. Among Dravidian Brahmins even, in spite of their exclusive twice-born pretensions, we occasionally meet with examples referable to the Australoid type of feature,[1] showing them to be descended from proselytes admitted by the earliest Aryan missionaries, after their disseverance for ages from their countrymen in the north. The order in which Professor Huxley enumerates these examples of what, for want of a better title, he calls the Australoid type, might lead (although he nowhere says so) to the inference that it had spread northwards from Australia. But I consider the reverse to be more probably the fact, and would rather trace its course southwards, from a Trans-Himalayan source, at a period coincident with the earliest dispersion of mankind. Indeed, I will even go farther, and state my belief that the first occupants of Europe, as well as of Asia, were derived from this stock.

In India, horde after horde poured in from the north and west, each driving their predecessors onward, till the earliest occupants were arrested by the sea, where now their names only survive in traditions of demons and monsters [*pisáchas* and *rákshasas*],[2] who,

[1] A definition of Dravidian physiognomy is given by Logan, in an essay on the Ethnology of the Indo-Pacific Islands, chap. v. sec. i. Journal Eastern Archipelago, vol. vii. p. 302. See also Hodgson's Physical Type of Tamilian Form, Journal Asiatic Society Bengal, vol. xviii. p. 710.

[2] Similar contumelious terms are often applied by the strong to the weak whom they have expelled: witness the Scandinavian Ogres; the Teutonic Jotuns and Thursen; the Greek Titans and Cyclops, etc.

despite their evil reputation, are allowed to have attained to some proficiency in literature and the arts.

The progress of extermination was more searching and complete in the west. The other Turanian family—Huxley's Mongoloid type—pressed upon the earlier (or Eu-Turanian) settlers towards the south-west, and pushed them onward. But it was by alien races that the work of extirpation (or it might be amalgamation with the new-comers) was completed. Celts, Teutons, Slaves, swept over the land; so that, save lingering remnants in the Basque provinces, and "the ethnological islands" of Iberians in Ireland, in Wales, in south-east France, and also in Sicily,[1] no living representatives of the race remain.

Ample traces, however, of former wide-spread dominion, exist in the survival of Turanian customs connected with marriage, inheritance, religious belief; and their primitive sepulchres (four slabs of stone covered by a fifth) stud the steppes of Asia, from the seats of the Tschudi to the plains of Hindustan, where the pandu-kulis find representatives in the kistvaens and dolmens of Cornwall, Brittany, and in Kits Coty-house in Kent; whilst the number of dolichocephalic skulls exhumed from rifled barrows, perhaps, too, the submerged lake-dwellings, bear testimony to the extent of their range.

The other great division of the Turanian stock, the Mongoloid type, is the most widely diffused of all the races of mankind, occupying an area lying east of a line roughly drawn from Lapland to Siam, and including the whole of the New World.

The people roaming over this vast area have many points in common with the preceding type, in the genius of their language, their wandering habits, and some of their customs and superstitions. It is by physical characters and physiognomy that the typical Mongol is mainly distinguished. In the east of Asia the form of the cranium gradually changes from the round to the elongated form, and so passes into America, where it is perpetuated among the Red Indians. The same change is observable among the Chinese, who, however, retain the oblique eye and other Mongoloid features; and similar variations are found in the Asiatic islands. From their original seat in the centre of Asia they appear to have spread mostly to the north

[1] Professor Boyd Dawkins's Report, British Association for the Advancement of Science, 1873, p. 142.

and east. Again and again their swarms,—Huns, Saracens, Tatars,—bursting their bounds, threatened to overwhelm the whole of Europe; but, after partial success, were rolled back by western chivalry, to cause fresh displacements in other directions in the seats from whence they came. Inured to the severity of the seasons, they were probably the first to occupy the northern parts of Europe; and the frequent intermixture of the two characteristic forms of skull in the same barrows in our own island points to relations either as neighbours or successors.

It is impossible for one so little versed in the subject to give a comprehensive view of the vast number of dialects coming under the extended field assigned to the Section. It will suffice to notice shortly the principal groups under which they may be classed, so as to assist in the arrangement of the papers presented to us, and to regulate the order of discussion.

As far as I can learn, the most important of these communications are connected with the Tartar languages, by which I mean those of northern Asia.

It is only since the beginning of the present century that these have been submitted to scientific criticism. Rask 1821–6, Castren 1830–45, Schott 1836–49, have paid much attention to their affinities; but the conclusions at which they have arrived do not always tally. There seems to be no question, however, that the dialects spoken in the region of the Ural Mountains form one well-defined group. They have been called the Ugrian family, among which may be specified the Finnish, the Wogul, the Ostiak, the Magyar. In connexion with these, we are promised a paper by the distinguished Hungarian Professor, M. Hunfalvy, of Pesth.

The Turki or Tartar tongues form another extensive group, the centre of which, resting on the Altai chain, is the seat of the typical Mongoloid race. The conquests of Gengíz Khan and Timúr gave a certain coherency to the hordes between the frontiers of China and the Caspian; but their dialects continue distinct, and vary in fullness from the poor and simple forms of the Tunguse and Mongol, to the more cultivated literature of the Osmanli.

The most interesting subject of investigation connected with the Tartar family of languages is that of the archaic dialects, brought to light by the cuneiform inscriptions, relating to primæval Turanian

rule, before the rise of Semitic power in Mesopotamia. Much yet remains to be discovered in this new field, opened by the labours of Messrs. Hincks, Norris, Oppert, Sayce, and others. It will be brought under the notice of the Section by a paper received from Mr. Isaac Taylor, whose researches into the vext question of the Etruscan language must be fresh in the minds of all; and who, in the communication in question, proposes to strengthen his relegation of the tongue of the Rasenna to a Turanian source by illustrations drawn from the grammar, affinities, mythology, etc., of the Babylonian dialects of Sumeri and Ackad. Their philological relations have likewise been investigated by Mr. Hyde Clarke, from whom two papers have been received.

The Turanian dialects of northern, are divided from the more polished languages of southern Asia, by the vast steppes and lofty mountain ranges of the centre of the continent. The natural strength of this region has enabled the hardy mountaineers of Tibet, Nepál, Bhútan, and other Alpine states, from the Paropamisus to Cathay, to preserve their independence, while its inhospitable and unhealthy fastnesses have afforded retreats to a vast number of refugees from intestine revolutions, or from the ebb and flow of successive migrations.[1] Secluded from intercourse with more civilized neighbours, they have undergone little change, and still, by the co-existence in some instances of a dominant and a servile class, exhibit traces of social dislocations anterior to their own. Conspicuous by their alien customs and unknown speech, they stand the living monuments of a lost or almost forgotten race. For the most accurate knowledge we possess of these outlying communities, we are indebted to Mr. Brian H. Hodgson, for many years British Minister at the Court of Nepál, and Chevalier of the Legion of Honour (an acknowledgment by France of merits unrecognized by his own Government). He has described, in a series of essays, published in the Journal of the Asiatic Society (and of which Trübner has just announced a collected edition), some

[1] A touching evidence of the extremities that drove these fugitives from death or slavery into a tract deadly to all but those inured to it for ages, is furnished by the name of Awalias, applied collectively to the "broken tribes" of the Tarai, from *awal*=malaria. Centuries must have elapsed before the constitution became proof against a poison fatal to all others from April to November.—Journal Asiatic Society Bengal, vol. xviii. p. 709.

20 or 30 tribes, in and around Nepál, with careful analyses of their dialects. These he divides into two classes: the one with a more complicated structure, approaching the Dravidian (or Australoid?) type, which he designates *pronomenalized;* and the other of simpler form, affined to the Tartar (or Mongoloid) class, he calls *unpronomenalized.* The farther he pushed his inquiries, the more convinced he became of the unity of all Turanian tongues, including Chinese, Polynesian, Caucasian, and other allophyllian forms of speech. But he has only crossed the threshold of a storehouse of ethnological discovery, promising important results, in which, as yet, he has had few followers. The same serial contains memoirs of a few detached tribes, without adding much information of linguistic value. Mr. Robinson, of the Bengal Education Department, has given grammars of the Assam valley dialects, and several missionaries have contributed the results of their vernacular studies, as Mr. Phillips's Santal Grammar, and Mr. Puxley's Vocabularies; Mr. Hislop's Gond Lists; Mr. Stoddart's Gáro Primers; the Uraon Grammar of Mr. Batsch, etc.; and the German Missionaries, who sacrificed their lives in Gondwana, and the Americans in the Karen country, have done good service. The first European who mastered the Kond or Kui dialect was the late Captain J. P. Frye, of the 22nd M.N.I., Assistant to the Governor-General's Agent for the suppression of human sacrifices in Orissa. He prepared several elementary works, employing Telugu letters to express Kond sounds; but the series was cut short by his early death. An "Introduction to the Kond Grammar," using Uriya characters in place of Telugu, was presented to me in 1853 by Lingam Lakshmaji, an officer of the Agent's establishment,—a very creditable specimen of native scholarship. But none of these grapple with the subject as Mr. Hodgson did. A vast field still remains to be explored. Innumerable tribes, unknown even by name, are secluded in the wild tracts between Tibet and the frontiers of China proper, of which we only get occasional glimpses. Captain Lewin introduces us in Chittagong to the "Sons of the Hills" (Toungtha), and the "Sons of the River" (Kyoungtha), with some of whose many subdivisions we come in contact oftener as enemies than as friends, through the misconduct of our native frontier officials. Col. Dalton's handsome volume of the ethnology of Bengal enumerates upwards of 50 tribes, several of which had already been dealt with more critically by Mr.

Hodgson. Even within our own territories, the various hill-races, and the nomade castes wandering over the plains, present obvious subjects for investigation, without exposure to danger or much cost of labour.

An attempt has been made by Mr. W. W. Hunter, of the Bengal Civil Service, to generalize the information already collected. But the results are not commensurate with the zeal and ability of the author, as he himself was ready to admit. His materials were chiefly derived from Mr. Hodgson, who had largely utilized them already, while the period allowed for the completion of his task was far too short for the treatment of so large a subject. The plan embraced a comparison of vocables only, and did not touch on structure; and the want of a recognized phonetic scheme, as the author allows, is unfavourable to an exact estimate of the value of roots expressed in Roman characters by different writers. Nevertheless the conception is worthy of all praise, and with a wider range of comparison and more accurate appliances, it promises to yield a rich and interesting field of ethnological research. If, as seems not improbable, the Turanian occupation of Australia took place at a time when that great country still formed an integral part of Asia, it may be assumed that the people, cut off by later geological changes, have been little altered by external influences. A critical examination of their numerous dialects, compared with those we have just been considering, and those of other rude tribes, of whom we know not even the names, or if we do, but little more, as the Ainos of Japan, the Miautz' ("Sons of the Soil") of China, the Jaddahs and Mincopis of the Andamans, the savages of the Nicobars, the Védars of Ceylon, the aborigines of the interior of Formosa and the other islands of the Archipelago, and these again with the Talains of Pegu, the Karens of Siam, the Kolarian tribes of India, and the robber hordes of Beluchistan, etc., may yield data for tracing more completely the origin and ramifications of the Turanian family.

The languages spoken in the division of the Turanian province to the south of the mountainous region form four well-defined groups. 1. The so-called monosyllabic tongues of China and Japan on the east. 2. The Dravidian languages of India on the west. 3. Between these, the dialects of Arakan, Siam, Burma, etc., with a monosyllabic structure, and an Indian phonetic system, to which the

name of the T'hai family has been given, from the principal or Siamese member of the group. 4. The language of the Malays, vernacular in the Golden Chersonese, and the coasts and islands of the Archipelago.

Of these I will first notice the Dravidian, with which I am the best acquainted. It is represented in its most perfect form by the Tamil spoken in the Carnatic, the Dravida-désam of the natives, whence the generic name. The influence of Aryan supremacy has there been felt the least. The more northerly dialects of Telugu and Canarese, as also Malayalim, have adopted the phonetic system of Sanskrit. Tamil alone retains its normal rugged alphabet. It wants altogether the aspirated letters, and has some two or three sounds and characters peculiar to itself. It has been cultivated and refined by native poets and grammarians, and under the princes of the Pándyan dynasty the College of Madura was celebrated for its learning and for the refinement and polish it imparted to Tamil literature. Not less important has been the influence of western scholarship. The Jesuit missionaries, in particular, have left their impress on the language. Roberto de Nobili, an Italian Father (1607), composed many works in the latter half of the seventeenth century;[1] the most celebrated of which, the *Iniyána-upadésam*, is written in Shen or High Tamil. He was also the author of the so-called fifth Veda, foretelling the advent of a superior race of Brahmans from the west, which passed current till its spurious character was exposed by the late Mr. Ellis. But Father Constantine Jos. Beschi, who arrived in 1700, has established the highest reputation. His grammars still form the best introduction to the language, and his *Sadar-agarádi*, a dictionary of the Shen or High Tamil, is the standard lexicon of that dialect to this day. Among his voluminous writings a metrical history of our Saviour—the *Tembávani*, composed about 1726—is considered one of the most elegant and classical works in the language. The original autograph MS. of the poem was purchased by the late F. A. Ellis from the son of Beschi's disciple in the beginning of the century, but was lost for a time after that able student's premature and unexpected death in 1818. It was my good fortune to recover it, and it is now deposited in the Library of the India Office, from whence it has been sent for exhibition to the Section this evening.

[1] He died at St. Thomé, 16th January, 1656.—Asiatic Researches, vol. xiv. p. 58.

The language continued to be cultivated by the missionaries of the Christian Knowledge Society, and in 1728 the Scriptures, translated by Ziegenbalg, were printed in Tamil type at Tranquebar. A copy of this edition, now of extreme rarity, is also before us. The names of Rottler, Rhenius, and other Danish scholars in the same mission, are conspicuous for useful works. Still later, Dr. Caldwell, by his *Comparative Grammar of Dravidian Languages*, of which a second and improved edition is about to appear, has thrown a flood of light on this class of tongues; and more recently Dr. G. Pope has appended a grammar of the Toda dialect to Col. Marshall's account of that tribe [1873], in which he traces analogies between the Tamilian and Celtic tongues. Mr. Burnell, of the Civil Service, besides making catalogues of the Sanscrit libraries of Tanjore and other places, has also paid considerable attention to the vernacular literature. Nor must I omit to mention the German scholars connected with the Basle mission. Dr. Moegling has edited lithographed editions of the most remarkable Canarese classics under the title of *Bibliotheca Carnatica*, and his fellow-labourer, Dr. Gundert, has produced a Malayalim Dictionary, published in 1872, admirable for its fullness and arrangement—a model of lexicography. Mr. Brigel has contributed a grammar of Tulu; and Mr. Metz, who has long laboured among the inhabitants of the Nilagiri mountains, has collected ample vocabularies of the aboriginal castes found there.

I may add that within the last few months Mr. H. W. Bellew, C.S.I., of the Bengal Medical Service, has published a grammar and vocabulary of the Brahoe language, in a Narrative of a Journey from the Indus to the Tigris (1873). No papers have been sent to this division of the Section; but Baron Textor de Ravisi, lately Governor of the French Settlement of Karical in the Carnatic, will address the Section in commendation of the study of Tamil literature, and the importance of its more critical cultivation in this country.

The languages of China and Japan, especially the latter, were largely discussed at the first Congress. In this department the French Sinologists, from the time of Abel Remusat and Stanislas Julien, have held a foremost place. Nor have our own countrymen been behindhand. We can boast of worthy successors to the veteran Morrison, two of whom, Mr. Beal, translator of the travels of the earliest Chinese pilgrims, and Mr. Edkins, who has done much to

elucidate the local dialects, have submitted interesting papers, which will now be read; after which M. de Rosny, the distinguished President of the last Congress, desires to offer some observations.

In connexion with this branch I may call attention to the dictionary of the Chinese dialect of Amoy, by the Rev. Carstairs Douglas [1873], which possesses this remarkable quality, that the Chinese signs are represented by Roman characters, an ingenious experiment, carrying out in some degree the suggestions thrown out in the President's Address for the adoption of an alphabet suited to all languages. I may also notice the Rev. Dr. Legge's translation of the Chinese classics, comprising seven works, and filling eight volumes, five of which have appeared, as of the greatest value to every one engaged with the literature of the Celestial Empire. Dr. Legge is still continuing his valuable labours.

Of the T'hai languages I can say little, and of the Malayan still less. Leyden's essay on the Indo-Chinese languages, in the tenth volume of the Asiatic Researches, gives an excellent compendium of their affinities, as applicable now as at the time it was written. The Journal of the Eastern Archipelago, commenced in 1847, will be found a storehouse of information, to which I can confidently refer any one desirous of becoming better acquainted with them. The work was edited by Mr. J. R. Logan, he himself being a principal contributor, particularly in the departments of philology and ethnology, in which he did not confine himself to the topographical limits indicated by the title of the serial, but extended his investigations to the languages of India as well. After carrying the Journal through eleven volumes, it closed abruptly with the issue of the first part of the twelfth, in 1859. In the fifth volume will be found a notice of the T'hai Grammar of Bishop Pallegoix, Vicar Apostolic in Siam (1850).

I will now call on Professor Hunfalvy to read his paper.

ON THE STUDY OF

THE TURANIAN LANGUAGES.

By Professor HUNFALVY.

The notion of the Turanian languages generally accepted by the linguistic literature of this country is as ill-defined as its results are in the whole of a negative character. But, I believe, a description of any of those languages, showing clearly the relations existing between that and other ones belonging to the same group, may conduce to some positive results, which will be of great value in the classification of languages. For both these purposes I choose Hungarian, examining firstly the fundamental stock of words in its vocabulary, and then the grammatical forms of the words. The other languages with which the Hungarian words will be compared are the Vogul, the Ostiak, and the Finnish.

The fundamental portion of the vocabulary of every language consists of words which denominate the parts of the human body, the principal events of physical and moral life, the facts and phenomena of nature, the first elements of social life, economy, industry, religious belief, and science, the numerals, the pronouns and (pre- or) post-positions. The last two categories of words lead us to the grammar, about which any considerable mistake is almost impossible.

A.

Human Body.

	English.	Hungarian.	Vogul.	Ostiak.	Finnish.
1	head	fej, föv, fő	pong	—	pää
2	cranium	agy	—	og	aju
3	eye	szem	sem	sem	silmä
4	tear	köny	(sem-vit)	—	kyynö
5	ear	fül	pal	pal	—
6	mouth	száj	sop	(ong)	suu
7	tooth	fog	ponk	penk	pii
8	tongue	nyelv	n'elm	n'alim	(kieli)
9	throat	tor-ok	tur	tor	turkku
10	gum, jaw	iny	egn	angen	—
11	skin	haj	sau	sah	—
12	hair	fan	pun	pun	—
13	hand	kéz	kat	—	käte (käsi)
14	arm, elbow, bosom	öl	täl	tel	syli
15	finger	új, újj	tul'c	luj	(sormi)
16	ring-finger	nevetlen újj	nimtal tul'c	nemla luj	nimitön (sormi)
17	span	arasz	—	soros	—
18	elbow	könyök	—	kavan	kynärä
19	breast	melly	majl	mejl	—
20	liver	máj	majt	mugol	maksa
21	mark	velő	valem	velim	ytime
22	blood	vér	ver	vir	veri
23	heart	szü, szú	sim	sam	syömi, sydäme

We may be sure that these twenty-three words do not exhaust all the terms for the parts of the human body. Every language has some words peculiar to it, every one has certainly lost some words of the common stock. For instance, in the old Hungarian translation of the Bible (about 1466) we find the word *tügy* 'cheek,' which corresponds to the Finnish *tykö* 'apud,' 'penes.' In Modern Hungarian this word *tügy* is quite obsolete.

Besides the resemblance of the words themselves, we must also observe the mutations of sounds; such mutations, following definite rules, are always the surest proofs of the genealogical relationship of languages.

The initial consonant of the words numbered 1, 5, 7, 12 is in Hungarian *f*, in the other languages *p*. We may expect, then, that this will generally be the case.[1]

[1] I. F=P.

At the end of the words numbered 8, 16, the Hungarian has *v*, the others *m*. The Hungarian *név* 'name,' becomes in the others *nem, nim*; hence Hungarian *nev-etlen* is there *nem-tal*. (The 'ring-finger' is called in these languages 'the finger without a name.' We shall find opportunity to recur to this fact.)[1] In such words the Hungarian *v* or *j* is sometimes absorbed by a long vowel; hence 21, *velö* for *velej* in Vogul and Ostiak, is *valem, velim*; and 23, *szúl* for *szú* is in the others *sim, sam, syömi*, or *sydäme*. In corresponding words we find also *p* for *v, j*; for instance 6, the Vogul *sop* 'mouth,' becomes in Finnish *suu*, as if it were *suv* or *suj*, in Hungarian *száj*.

B.

Physical and Moral Life.

In citing verbs I cite the roots, not the infinitive. When a syllable or letter does not belong to the root, attention is called to the fact.

	English.	Hungarian.	Vogul.	Ostiak.	Finnish.
24	soul	lél-ek	lil	lil	—
25	mind	ész	us, es	us'	aist-i
26	to live	él	ol	vol	el-ä
27	to be, exist	val	ol	ul	ol-e
28	to die	hal	kal, xal	hal	kuol-e
29	to hear	hall	kul, xul	kul, hul	kuul-e
30	to lie	hál	kul'	hal	—
31	to go	men	min	man	men
32	to stand	úll	l'ul	lol	—
33	to sit	ül	unl	unl	—
34	to swim	u-sz	uj	—	uj
35	to regard	né-z	—	ni	näh-
36	to see	lát	uont	vant	vaat (Esthonian)
37	to do	te', tev	—	—	teh
38	to eat	e', ev	te	li	syö
39	to drink	i', iv	aj	ja	juo
40	to bear	vi', viv	vi	vi	vie
41	to take	ve', vev	vi	vi	ot
42	to become, to be	le', lev	jejm-t	ji	lie
43	to believe	hi', hiv	äu-t, ag-t	ev-il	—
44	to call	hiv	vau	vog	—
45	to be borne	szül-et	tel	ti, ti-il	synt
46	to swallow	nyel	nál	nel	niel

[1] II. Final *v* or *j* = *m*, sometimes = *p*.

	English.	Hungarian.	Vogul.	Ostiak.	Finnish.
47	to lick	nyal	—	n'ol-id	nuol
48	to flow	fú	pul	pu	puh
49	to freeze	fáz	pol'	pot	—
50	to fear	fél	pel	pil	pelj
51	voice	szó	suj	sij	—
52	to speak	szól	sujt	sijal	—
53	to read, count	olv-as	lau	lung-	luk
54	to stand up	kel	kval	kil	käy
55	to kill	öl	äl	vel	—
56	to find	lel	—	—	löy
57	to shut	lö	li	jou-t	luo
58	to bite	mar	pur	pur	pur
59	to vanish	vesz	uos	uš	—
60	to make vanish	vesz-t	uos-t	uš-t	—
61	to laugh	nev-et, nev-et	mau-int	noh	—
62	sleep, dream	álom	ulem	olim, ulim	—
63	to sleep	alu, alv	aj (al')	—	—
64	to dream	álmod	ajlmät	—	—
65	to ascend	hág	kang	kang	—
66	to give	ad	—	—	ant

The word numbered 24 *lél-ek, lil,* 'soul,' offers us an opportunity for observing the difference between *formative* syllables and *suffixes*. The formatives joined to the roots form different categories of words, and can be added on one after another. For instance, the root *lél,* with the formative *k,* becomes *lélek,* to which other formatives [such as *i, é, etlen, ll, ség*] can be joined, as *lelk-i* 'belonging to the soul'; *lelk-es* 'having a soul,' *lelk-etlen* 'being without soul,' *lelk-ll* which is always preceded by some adjective, as *kis lelkll* 'low-minded,' *nagy lelkll* 'great-minded,' *lelk-es-ség* and *lelkll-ség,* abstract substantives, meaning 'soulhood,' if such a term were allowable. The suffixes do not form new words; they are only exponents of the different relations in which the words stand to one another. For this reason they cannot be added on one after the other. The suffixes constitute the "cases" of the nouns and the terminations of the verbs. In the words hitherto cited, or which may hereafter be cited, formatives may sometimes be found, but never suffixes.

Having made the foregoing observations, we now cite as examples the words numbered 9, 18, 24, where the Hungarian words appear with the formative *k*; other examples will follow.

Continuing our observations upon the mutations of sounds, we find that in 28, 29, 30, 65, the initial of the Hungarian words is *h*,

answering to *k* of the corresponding words. But 13, 18, show that sometimes *k* is retained in the Hungarian words themselves.

The Hungarian and Finnish languages make a distinction between the vowels *a*, *o*, *u*, called *hard* or *low-sounding*, and *ä*, *ö*, *ü*, called *soft* or *high-sounding*, and *e*, *i*, called *middle-sounding*. The harmonic sequence of vowels depends on this distinction, according to which a low-sounding root, *i.e.* one containing hard vowels, requires formatives and suffixes with hard vowels, and *vice versa*; a high-sounding root, *i.e.* one containing soft vowels, requires formatives and suffixes with soft vowels. The root containing middle-sounding vowels is capable of receiving formatives and suffixes belonging to either class of vowels. Now, roots consisting of hard vowels change the initial *k* into *h* in Hungarian;[1] but roots consisting of soft vowels retain the initial *k*. Hence the Finnish *kuol*, *kuul*, become in Hungarian *hal*, *hall*; the Finnish *käy*, *kät*, are in Hungarian *kél*, *kéz* (hand).

But there are many cases also in Hungarian in which an initial *h* corresponds to *s*, or some other consonant; for instance, *hét* 'seven,' is in Finnish *seits*, in Vogul *sat*, in Ostiak *labït*, as we shall see when speaking about the numerals.

14, 15, 17, 32, 38, show a very curious change of sounds.[2] The Hungarian words, it will be seen, begin with a vowel, but the corresponding words have before that vowel *l*, *s*, *h*, *t*. We shall soon have more examples of this peculiarity.

48, 49, 50 follow the rule I.

In 1, 7, 33, 36, 45, 53, 65, 66, the nasal *n*, in Vogul, Ostiak, and Finnish words, is inserted before *g*, *l*, *t*,[3] and, as we shall see, the nasal *m* also before *p*, *b*. This nasal is not found in the Hungarian words; but instances of its use in Hungarian might also be adduced, as the Hungarian *munka*, 'labour,' 'fatigue,' compared with Ostiak *muka*.

Sometimes an initial *m* is changed into *n*, and *l* into *v*, even in the same language; for instance, the old Hungarian *mevet* 'to laugh,' *vép* 'to stride,' are now *nevet* and *lép*.[4] The final *m* changes generally into *n* in Finnish, as *sydän* 'heart,' for *sydäm*, from *sydäme*.

[1] III. *Initial h = k* in hard-sounding words.
[2] IV. Initial vowel is preceded by *l* or *s* or *h* or *t*.
[3] V. Nasal inserted.
[4] VI. Initial *m = n*.

C.

Facts and Phenomena of Nature.

	English.	Hungarian.	Vogul.	Ostiak.	Finnish.
67	name	név	nim	nem	nimi
68	earth	ma, mo*	mû	mû	maa
69	sky	em, in*	elm, ilm*	—	ilma
70	water	viz	vit	(jink)	vese (vesi)
71	fire	tüz	taut, tut	tuget, tût	tuli
72	stone	kü, kŏv	kav	kevi	kive
73	mountain	hegy	äh, ah	au-t	—
74	cloud	felhŏ, felleg	(tul)	paling	pilvi
75	wind	szél	(vuat)	(vat)	tuuli
76	fume	füs-t	pos-im	pus-ing	—
77	star	hugy**	kus	kus, hus	—
78	winter	tél	tal	tel	talvi
79	autumn	ősz	täkus	sugus, sûs	sykys, syksy, syys
80	spring	tav-asz	toja, tuoja	tovi	suvi
81	ice	jég	jang	jong	jää
82	coldness	fagy	pol'	pot-im	—
83	rime	lom	—	lon'-z	lumi (snee)
84	to boil	főv (föl)	pol'	pam	pal
85	lake	tav, tó	tur	tu	—
86	lake (small)	láp	—	—	lampi
87	river	jó***	ja	jog-an	jok-i
88	wave	hab	kump	hump	—
89	sun	nap	naj	naj	—
90	morrow	hol-val	hol-ejt	hol-ejt	—
91	evening	est	iét	jet-n	eht-oo
92	night	éj	jej	at	yö
93	moon	hó, hold	(jongop)	(tilis)	kuu
94	gold	arany	sarn'i	sorne	—
95	silver	ezüst	ezis (sirjän)	—	—
96	tin	ón	aln	uln	—
97	lead	ólom	—	lolpi	—
98	copper	vas****	vog	vog	vaski
99	tree	fa	(jiu)	(jug)	puu
100	grass	füv, fü	pum	pom	—
101	horse	ló, lov	lu	lovi	hepo, hoo
102	dog	eb	amp	amp	—
103	sable	nyaszt	n'ohs	n'ogos	—
104	marten	nyest	—	—	näätä
105	sheep	juh	oš, os	oš	uuhi
106	grease, butter	vaj	voj	voj	voi
107	mouse	egér	tänger	tenger	hiiri
108	goose	lúd	lunt	lunt	lintu (bird)
109	swan	hattyu	kateng	hading	—
110	crane	daru	täri	tor	—

	English.	Hungarian.	Vogul.	Ostiak.	Finnish.
111	crow	varju	—	voringa	varekse
112	swallow	fecske	—	—	pääski
113	nest	fész-ek	piti	—	pesä
114	egg	mony	mongi	mun	muna
115	louse	tetü	takom	tevdim	täi
116	maggot	nyü	ning	ning	—
117	game, venison	vad	uj	voj	—
118	fish	hal	kul	hul	kala
119	salt	só, sav	šah, čah	—	—

It may be opportune to remember here that Hungarian has not come to its present state without losing several words and forms. Besides the above-mentioned *tügy* 'cheek,' 68, 69, 81, are instances of lost words. 'Earth,' in 68, is called now *föld*, in Finnish *pelto*, which does not appear to be the German *feld* 'field,' because, firstly, with the Hungarians *mezö* is 'field'; and secondly, because in Scandinavian *fjeld*, from which the Finnish *pelto* could be derived, signifies 'mountain.' The Hungarian *föld* and Finnish *pelto* seem, therefore, independent of either *feld* or *fjeld*. 'Earth' is called in Finnish *maa*, in Vogul and Ostiak *mû*, *mo*. The Hungarian language has preserved this word only in the proper name *ma-gyar*, the ancient form of which was *ma-ger*, *mo-ger*, a compound from *ma*, *mo*, 'earth,' and *ger* or *gyer* 'man.' This *gyer* is the root of the diminutive *gyer-ek* (an expression in daily use) 'a boy' or 'little man.' It must have existed also in the shape of *gyerm*, for we have also the diminutive *gyerm-ek* 'little man.' Both find their corresponding words in the Vogul *kär*, *kärem*, 'man,' the diminutive of which is likewise *kär-k* or *kär-ku*, *kär-kve*=Hungarian *gyer-ek* 'little man.' The original *gyer*, according to the law of the harmonic sequence of vowels, is changed now into *gyar* in *ma-gyar*; but some centuries ago it was still *ma-ger* or *mo-ger*, that is, 'man of the earth, man of the land.' The word *földi* signifies now the same, like the Esthonian *mâ-mês* 'land-man, man of the land.'

69, *em*, *in*, is very rarely found by itself, but it occurs in compounds *em-ber* and *in-ség*. The Finnish *ilma* denotes 'sky'; this in Vogul is *ilm*, *elm*; in Sirjän *in*, *en*, with the signification 'God.' The Vogul mythos of creation calls man *elm-kals* or *ilm-kals* 'mortal of the sky, of heaven.' The Hungarian *em-ber* comes from *em-gyer*, signifying the same; here *gyer* does not change its vowel, for *em* is a soft-sounding word.

The Finnish *ilma* denotes not only 'sky,' but also 'emptiness,' in consequence of the sky or air looking empty; when employed as a preposition, it corresponds to the English 'less.' Hungarian retains this signification also, for *in-ség* denotes 'denudation,' 'poverty.'

The Hungarian *hugy*, 77, survives still in the modern Hungarian Bible, in the signification of 'star,' but neither in the common speech nor in the modern literature does this word occur.

87, *jó* 'river,' is also obsolete as a word standing by itself, but we find it included in several proper names of rivers; for instance *Sa-jó* (for *Saj-jó*) 'salt river,' like the German 'Salzach'; *Ilé-jó* (following the vocal harmony, *Ilé-jö*) 'warm river,' *Táp-jó*, *Si-jó*, *Berek-jó* (now *Berettyó*) river of Táp, Si, Berek.

98, *vas*, is properly not copper, but iron. The words which are compared with it show that they all might have signified originally *brass*.

Returning now to the mutations of sounds, we find that the final consonant in the Hungarian *vis*, *tüz*, *fész-ek* (70, 71, 113), compared with *vit*, *vet*, *taut* or *tut*, *pit*, has changed into *s* or *sz*.[1] This was also the case with 13. Additional examples will be seen hereafter; for instance *száz*, 'hundred,' in Vogul, etc., is *sat*. The change of *t* into *z*, *s*, occurs also in the middle of words; for instance, *ezer* 'thousand,' in Vogul *sater*.

The curious mutation of sound mentioned above (Rule IV.), reappears here in 79, 97, 107, where the Hungarian words begin with a vowel, whilst the corresponding words have a consonant preceding the initial vowel. Two instances may explain this. The Ostiak *sugus* or *sûs* (79), the Finnish *syksy* (*sykys*) or *syys*, is in Vogulian *täkus*, but in Hungarian *ösz*, i.e. 'autumn.' The succession is therefore *täkus*, *sykys*, *sugus*, *sûs*, *syys*, *ösz*. In 107 the succession is as follows: Vogul *tänger*, Ostiak *tenger*, Finnish *hiire*, Hungarian *egér*, i.e. 'mouse.' The Finnish *hiire* shows, too, not only the change of the initial, but also how the guttural disappears between two vowels (as in the French *eau* from *aqua*). *Hüre* for *higir*, *hijir* (Morduin *śejer*), the *g* of which had lost the nasal (Rule V.), like the Hungarian *eger*. The same disappearance may be observed in 71 in the Ostiak *tugot*, Vogul *taut*, Hungarian *tüz*. The dental and labial, likewise,

[1] VII. *t* changes into *z*, *s*.

sometimes disappear between two vowels as (in French *père, mère, frère*, from *pater, mater, frater*), see 115, where *tevdim, takom, totŭ*, and *täi*, 'louse,' correspond. Compare also the Ostiak *labït=seit=sat, hét*, i.e. 'seven.'[1] This vanishing or disappearance becomes possible, by the consonant being previously changed into a vowel.

At the end of the words *t* changes not only into *z, s*, but also into *l*, and both are sometimes dropped in Hungarian.[2] 20, 'liver,' is in Ostiak *mugol*, Finnish *maks-a* (*mag-s* or *-l*), Vogul *majt* (for *mags*), where the guttural changes into a vowel, and Hungarian *máj*. The same will be seen in 140, where the Ostiak *jugol* 'bow,' the Vogul *jaut* or *jajt*, and the Hungarian *íj, íjj* or *ív* correspond.

D.

The Family and the First Elements of Social Life.

	English.	Hungarian.	Vogul.	Ostiak.	Finnish.
120	father	atya	(jäg)	azi	—
		is	(jig)	is	isä
121	mother	anya	angue	anki	—
		em	—	imi	emä
122	masculus	him	kum	hoj, ho	—
123	female, wife	nö	ne	ne	naj
124	man	em(-ber)*	elm(-kals)	(hanne-ho)	imeno (?)
125	son	fi	pi	pog	pojk-a
126	daughter	lá-ny, lyeá-ny	aj, jea	evi	—
127	father-in-law	ip	up	up	appi
128	mother-in-law	nap	—	—	anoppi
129	son-in-law	vő, vej	vap-s	veng	vavy
130	daughter-in-law	meny	mäń	men'	miniä
131	half, partner	fél	pal	pal	puoli
132	house-wife (as partner)	feleség	—	—	puoliso
133	house	haz*	kvol	kot	koti
134	master, lord	úr	—	uort	uros, uroh
135	servant, slave	ör**	—	ort	orja
136	village	falu	paul	pugol	—
137	town	vár-os***	uos, us	uš	—
138	garden	kert	kart	hart	kartano****
139	door	aj-t-ó	aui	ovi	ovi
140	bow	íj, ív	jaut, jajt	jugol	jout-si
141	arrow	nyíl	n'äl, n'al	n'ol	nuoli

[1] VIII. Guttural, dental, labial, disappear between two vowels.

[2] IX. Final *t* changes also into *l*, or is dropped off.

	English.	Hungarian.	Vogul.	Ostiak.	Finnish.
142	handle, shaft	nyél	näl	nal	—
143	to shoot	lö	li, lu	jout	—
144	to cut	vág	vuong	vuong	—
145	knife	kés	kesäj	keži	—
146	to fish	—	kul'-t	hol	—
147	net	háló	kul'p	holïp	—
148	net	vész(-háló)	uos-em	vož-im	—
149	net	(halászó-)pon	pon	(holti-)pon	—
150	to spin	fon	—	(puln = nettle) pun	
151	to weave	szö	sau	sevi	—
152	to knit	köt	—	—	kuto
153	to put on (clothes)	ölt	(ul)	(ul)	—
154	clothe, garment	öltö	ulem	ulam	—
155	dress	mez	mäs	—	—
156	girdle	öv	—	—	vyö
157	law	szer	ser	sir	—

The nouns denoting family relationships are surely of as great interest as those which concern social life. But before we enter into full consideration of them, we must premise some remarks upon the following words.

No. 124, *ember*, and its Vogul correspondent *elm-kals*, have already been explained; but it is very curious that the origin of the Finnish *imeno* (*im-eno*) or *ihmis* is unknown. Perhaps there may be found some relation between the Hungarian and Vogul *em-(ber)*, *elm-(kals)*, and the Finnish *im-(eno)*, *ihm-(is)*.

The Hungarian *haz* (133) has now become *ház*, with a long *a*, and this looks like the German 'hause.' But the resemblance is quite fortuitous, for the Hungarian word is originally *haz*, which is proved by *haza* 'to one's home, home,' and *hazul* 'from home'; still more is it proved by the corresponding Vogul, Ostiak, and Finnish words.

The word 'garden' (138) seems likewise foreign; but the Vogul and Ostiak *kart* signifies 'court.' Or should we compare this *kart* with the English-Norman 'court'?

ör 'servant, slave,' is now antiquated, being replaced by the Slavonian *szolga* (sluha), but we find it in a memorable decree of S. Ladislaus.[1] By this example we may see how words sometimes fall

[1] S. Ladislai Decretorum, lib. iii. caput 2:—"Præcipimus etiam ut idem Regis nuncius palam faciat omnibus, tam nobilibus quam ignobilibus, imprimis Episcopis, Abbatibus, comitibus, postea vero minoribus: quod a tempore regis Andreæ et ducis Belæ et a descriptione judicis *Sarchas* nomine, apud quemcunque aliqui civium vel

out of use when supplanted by other words, although the words by which they are supplanted happen to be foreign ones.

'Son-in-law' in Hungarian is *vő*, a contraction for *vej*, *vev*, *vevö*, *i.e.* one who purchases or takes, for in old times to take a wife was to buy a wife. The Finnish *vävy* looks quite identical. The Ostiak *veng* differs somewhat in form, but we found that the Hungarian *v* sometimes corresponds to *ng*; for instance, 1, where the Hungarian *fej*, *föv*, 'head,' corresponds to the Vogul *pong*. So also here the Hungarian *vej*, *vöv*, corresponds to the Ostiak *veng*. In general the sounds *ng*, *ny*, change into *m*;[1] for instance, the Hungarian *torom* (German 'thurm') becomes *torony*, just as the Ostiak *ńah* becomes *mav-int* in Vogul, and *mev-et*, now *nev-et*, in Hungarian. The Ostiak *veng* seems still more widely different from the Vogul *vaps*; but it is really the same as the Hungarian *vev*, *vő*, the final *v* being in Vogul *p*, to which is joined the formative *s*. This will become clearer by the following examples. The noun in question is derived from the verb 41; other examples may be seen in 26 and 55.

	Hungarian.	Vogul.	Ostiak.	Finnish.
40	ve'	vi	vi	vie
participle	vő (vev)	vip, vap	vip	vievä
26	él	ol	vol	elä
participle	élő (elev)	olip, olp	volip, volp	elävä
54	öl	äl	vel	—
participle	ölő (ölöv)	alip	velp	—

To the participial form in *p* Vogul and Ostiak join the formative *s* (*as*), thus forming nouns, as *vep-s* 'son-in-law,' *volp-as* 'life,' *velp-as* 'arm, killing arm.'

(illorum) aliorum qui dicuntur *Ewrek* vel servi detinentur in Assumptione S. Mariæ regi præsententur." The King alludes to the revolt of the Pagan Hungarians against Christianity, after the expulsion of "Petrus Alemannus," who reigned some years as successor of S. Stephan. Andrew and his brother Bela, the descendants of the Arpadian family, were called home from their flight by the popular party which was uprooting all the Christian institutions. The old office of dignity was then revived, which Constantinus Porphyrogeneta (De Administratione Regni) names καρχας, and which (as we may conclude by the expression of the Decree) seems to have been that of judge, who decided questions of property. This dignitary reinstituted the slavery which had been abolished by S. Stephan. A slave was called *ewr* = *ör*, in the plural *ewrek* = *örek*.

[1] X. *ng*, *ny*, change into *m*.

E.

Numerals.

In all languages the numerals have a place amongst the most unerring indications of linguistic affinity. They are only surpassed in philological importance—if indeed they are surpassed—by the personal pronouns and the case-endings of the nouns.[1] This we must grant, however, with some reservation as regards personal pronouns; as we hope to have an opportunity to observe, that these pronouns, and some of the demonstrative ones, seem to belong equally to very different classes of languages. But let us first consider the numerals.

	Hungarian.	Vogul.	Ostiak.	Finnish.
1	egy	äkv	it, i	yht (yksi)
2	kat, kettő	kit, kiti	kad, kadn	kaht (kaksi)
3	három	korom, horom	kholim, holim	kolme
4	négy	nile	nel, nil	neljä
5	öt	ät	vet, vuet	viit (viisi)
6	hat	kat	hot, hut	kuut (kuusi)
7	hét	sât	labit	seitse-män
8	nyol-tz	n'ol-lu	n'i-il	kahde-ksan
9	kilen-tz	antel-lu	jert-(irr-)jang	yhde-ksän
10	tíz	lau, lu	jang	kymmenen
20	húsz	kus	hus	kaksi kymmentä
30	harmin-tz	vât	holim-jang	kolme ,,
40	negyven	nelimen	nel-jang	neljä ,,
50	ötven	ätpen	vet-jang	viisi ,,
60	hatvan	katpen	hot-jang	kunsi ,,
70	hetven	sât-lau	labit-jang	seitsemän ,,
80	nyolczvan	n'ol-sat	niil-sot	kahdeksan ,,
90	kilenczven	antel-sat	jert-sot	yhdeksän ,,
100	száz	sat	sot	sata
1000	ezer	sater	soris, t'ores	(tuhannen)

Here, as in some preceding cases, certain words are placed in brackets. These exhibit the Finnish nominative, because the comparison requires that the roots should be given. *Yksi, kaksi, viisi, kuusi*, are nominatives. Sometimes the words in brackets indicate the equivalents.

The numerals from 1 to 7 are almost identical, even in their outward form. For 'one' the Finnish *yht* is the fullest form; the Hungarian *egy* (*egi, eǵ*) has lost the final *t* (as in 20, 140), as also the Vogul *äkv, akv*, but the *t* is replaced by *y, j*, and *v*. The Ostiak *it* shows the same relation to the Finnish *yht*, which appears between

[1] Isaac Taylor's Etruscan Researches, p. 108; London, 1874.

the Hungarian and Vogul *két, kit* and the Finnish *kaht*. The Ostiak *i* for *it* is the shortest form.

The word for 'two' has, in the three first languages, a double form, the first being attributive, the second, which is a dual, absolute. The Hungarian *kettő* and the ancient *monnó* 'both,' are now the only remains of the dual which exist in Vogul and Ostiak.

For 'seven' the Finnish has *seitse-män*. The primitive is *seit* or *seits*, the syllable *män* is a formative. In Hungarian *hete-vény* 'Pleiades' or 'seven stars,' corresponds to *seitse-män*. Comparing *seit* or *seits* with the Ostiak *labit*, we see that this is the fullest form, of which the initial *l* corresponds to *s* and *h* of the other words, according to the Rule VIII. of mutation of sounds.

The numerals 'eight' and 'nine' are compounds expressing a subtraction 2—10, 1—10, which is clearly shown by the Finnish *kahdeksan, ykde-kän*. The Hungarian 'eight' *nyol-tz*, has, as an equivalent to the Finnish *kahde*, the obsolete word *n'ol*, which is identical with the Vogul *n'ala* or *n'ol* in *n'ala-lu* (2—10), and *n'ol-sat* (2—100, for 20—100). By this last example we see that Vogul and Ostiak repeat the substratum in forming the numerals for 80 and 90.

The words for 'ten' are different in the four languages. But the compounds from 20 to 90, formed by multiplication, show the closest relationship between Hungarian and Vogul.

The numerals now cited tell us much respecting the ancient history of the Finno-Ugric people, but we must now proceed to the consideration of the pronouns.

F.

Pronouns.

Personal Pronouns.

English.	Hungarian.	Vogul.	Ostiak.	Finnish.
I	én	äm, am	ma	minä
thou	te	näng, nag	nang, ning	sinä
he, she	ő (vö)	täu, tav	lu	hän
we	mi, miv, mű mink	man	mung	me, met
you	ti, tiv, tű tik	nan	neng	te, tet
they	—, iv, ű ők	tan	li	he, het

The Vogul and Ostiak have a dual too, which we omit the relating of.

The Personal Pronouns in Hungarian have only two forms, the genitive possessive and the accusative. Thus:—

Genitive Possessive.

English.	Hungarian.	Vogul.	Ostiak.	Finnish.
mine	enyém	ánom	maotem	minun
thine	tied, tiéd	nängen	ningoted	sinun
his, her	övé	—	—	hänen
our	miénk	—	—	meidän
your	tiétek	—	—	teidän
their	övéjek, övék	—	—	heidän

Accusative.

me	engem	anom	manem	minun
thou	téged	nängen	ningen	sinun
him	őt	täuen, tavame	luel	hänen
us	minket	manau	munau	meidän
you	titeket	nänän	ningilan	teidän
they	őket	tanänl	liel	heidän

For expressing the other cases of Personal Pronouns, Hungarian employs the postpositions suffixed by the possessive suffixes. For instance, *nál* 'by,' *től* 'from.'

by me	nálam	by us	nálunk
by thee	nálad	by you	nálatok
by him	nála	by them	nálok
from me	tőlem	from us	tőlünk
from thee	tőled	from you	tőletek
from him	tőle	from them	tőlök

These possessive suffixes, *m, d, a, ja*; *unk, tok, ok, jok*, are joined to every noun, in accordance with the laws of vowel-harmony in Hungarian and Finnish,—which can be scarcely seen in Vogul and Ostiak. Take, for instance, the words *kez, kat, kät*, 'hand.'

Hungarian.

kezem	'my hand'	kezed	'thy hand'	keze	'his, her hand'
kezünk	'our hand'	kezetek	'your hand'	kezök	'their hand'
kezeim	'my hands'	kezeid	'thy hands'	kezei	'his hands'
kezeink	'our hands'	kezeitek	'your hands'	kezeik	'their hands'

VOGUL.

katem	katen	katä
katu	katanem	katanl
katanem	katanen	katanä
katanu	katanen	katananl

OSTIAK (*još* 'hand').

jožem	jožen	jožel
jožeu	jožen	jožel
jošlam	jošlan	jošlal
jošlau	jošlan	jošlal

FINNISH.

käteni	kätesi	kätensä
kätemme	kätenne	kätensä

The Finnish nominative does not express the difference between the singular and plural of the possessor; but this difference is expressed in the other cases; for instance, *kädessä* signifies 'in the hand,' *kädessäni* 'in my hand,' but *käsissäni* 'in my hands,' 'in our hand,' and 'in our hands.'

The possessive suffixes in the Lapp language are strikingly identical with the Hungarian.

LAPP.

giettam	'my hand'	giettad	'thy hand'	gieď'as	'his hand'
giettamek	'our hand'	giettadek	'your hand'	gieď'esek	'their hand'
gieď'aidam	'my hands'	gieď'aidak	'thy hands'	gieď'aides	'his hands'
gieď'aidomek	'our hands'	gieď'aidedek	'your hands'	gieď'aidesek	'their hands'

Demonstrative Pronouns.

ENGLISH.	HUNGARIAN.	VOGUL.	OSTIAK.	FINNISH.
this	ez, te	tit, ti	sit, si, ti, tä	tä-mä
that	az, to	tot, to	it i, to	tuo

The Hungarian words *ez, az*, correspond to the Vogul *tit, tot*, and to the Ostiak *sit*, the sound preceding the vowel being dropped according to Rule IV., and the final *t* being changed into *z*, according to Rule VII. The other two Hungarian words *te, to*, are exactly the same as the Vogul, Ostiak, and Finnish *ti, to* or *tä, to*.

Interrogative Pronoun.

English.	Hungarian.	Vogul.	Ostiak.	Finnish.
who	ki	kan-ga	hoj	ku-ka
what	mi	män	muj	mi-kä
which	melly, milly	mät	mada	millinen

Hungarian *melly, milly*, derived from *med, mid*, joined by the formative *ly* (*med-ly, mid-ly*=*melly, milly*). The same formative appears in the Finnish *millinen*, which is derived from *min* and *linen*. It exists also in the Vogul *kum-lye* 'what manner of.'

G.

Postpositions.

The case-suffixes are the most ancient and also the simplest of the postpositions, the origin of which is not now clear. These answer the question 'quorsum?' with *a*, or *e*, *i*; 'ubi?' with *n* or *t*; 'unde?' with *l*. The *a*, *e*, *i*, is combined also with *n*, and the *l* with *t*. The Ostiak suffixes are: *a, na, el'*, or *eul*; the last receiving *ta* becomes *el'ta* or *eulta*. The Hungarian simplest suffixes are: *a* or *e*, *n* or *t*, and *ól, öl*, which is exactly the Ostiak *eul*. A combination with *n'* gives *nyi, nyut* or *nyot, nyul* or *nyol*. Such a combination with *n* is also found in Vogul and Finnish.

The case-suffixes are joined also to the postpositions, of which there is a great number in every Finno-Ugric language. Some examples may show how they proceed. The Hungarian *fe* (*fej, fő*) and the Finnish *pää* signify 'head'; the formative *l* makes a new word: *fel, pääl* 'being over,' 'what is over.' To this are joined

the case-suffixes:

e	t	öl =	felé	felett[1]	felől
			or		
ne	na	lta =	päälne päälle	päälnä päällä	— päältä

[1] By a mistake of analogy *tt* instead of *t*. The demonstrative pronouns are, as we know, *ez, az* (*oz*), originally *ed, ad* (*od*).

and the possessive suffixes:

a).

felém	feléd	feléje;	pälleni	päällesï	päällensä
felénk	felétek	feléjek;	päällemme	päällenne	päällensä

b).

felettem	feletted	felette;	päällämi	päälläsi	päällensä
felettünk	felettetek	felettök;	päällämme	päällänne	päällänsä

c).

felőlem	felőled	felőle;	päältäni	päältäsi	päältänsa
felőlünk	felőletek	felőlök;	päältämme	päältänne	päältänsä

The Ostiak *og* signifies also 'head,' the formative *ta, ti* (instead of *l*), makes a new word: *ohta, ohti* (*ogt*), 'being over.' To this joining the case-suffixes *a, na, el'ta,* we shall have *ohtija, ohtina, ohta-el'ta.* But *oht* receives also the possessive suffixes, thus:

ohtem	*ohten*	*ohtel*	'over me'	'over thee'	'over him'
ohtemu	*ohten*	*ohtel*	'over us'	'over you'	'over them'

And lastly to the possessive suffixes can be joined the case-suffixes:

ohtem-a	ohtem-na	ohtem-el'ta
ohten-a	ohten-na	ohten-el'ta
ohtel-a	ohtel-na	ohtel-el'ta
ohtemu-j-a	ohtenu-na	ohtemu-el'ta, etc.

We will adduce some postpositions of more uncertain origin. The one numbered 6 is an exception.

1 *Hung.*	al 'sub'	al-á	al-att	al-ól
Vog.	jol ,,	jol-e	jol-n	jol-el
Osti.	il ,,	ill-i	ill-i	il-ta
Finn.	ali ,,	all-e alel-le	all-a	al-ta alel-ta
2 *Hung.*	el 'ab'	el-é	el-ött	el-ől
Vog.	el ,,	el-e	el-n	el-ol
Osti.	jel ,,	jell-i	jell-i	jel-ta
Finn.	ete ,,	ete-he	ede-llä	ede-ltä
3 *Hung.*	kiv 'ex'	kiv-e	kin-n kiv-n	kiv-ül
Vog.	kvon ,,	kvon-e	kvon-n	kvon-el
Osti.	kam ,,	kamm'	kam-e-n	kam-e-lta
Finn.	—	—	—	—

4	*Hung.*	köz 'inter'	köz-é	köz-ött	köz-öl
	Vog.	kvot' „	—	—	—
	Osti.	kut „	kud-a	kut-na	—
	Finn.	keski (keskel)	keskel-le	keskel-la	keskel-ta
5	*Hung.*	hosz 'secundum'	—	hosszant	—
	Vog.	kosä „	kosäi	kosä-n	kosä-nl
	Osti.	hû „	huv-a	hu-na	hu-lta
	Finn.	kauk-a „	kaua-s	kauka-na	kaua-lta
6	*Hung.*	fél 'latus' 'dimidium'	fel-é	fel-ett	fel-öl
	Vog.	pal	pal-i	pal-n	pal-el
	Osti.	pel	pel-a	pel-na	pel-ta
	Finn.	puol	puol-ne puol-le	puol-na puol-le	puol-ta
7	*Hung.*	hoz 'ad, apud'	hozz-a	—	—
	Osti.	hoz' „	hoz'-a	—	—

The word 'half' *fél* is employed also in such connexions as *fél szem, fél fül, fél kéz, fél láb* (half-eye, half-ear, half-hand, half-foot), *i.e.* one eye (of the two) or one-eyed, one-eared, etc. In Finnish the word half follows the noun, as *silmä puoli, käsi puoli, korm puoli, jalka puoli.*

We must now as briefly as possible consider the verb.

H.

The Verb.

The verb of every language provided with grammatical forms expresses the personal pronoun more or less distinctly. These pronouns are the subject of the verb; in 'habeo,' 'sto,' 'habeor,' 'sequor,' in *τίθημι, τίθεμαι, τύπτω, τύπτομαι*, the subject of the verbs is expressed by *o, or, μι, μαι, ω*. The verb may be named, according to its different significations, verb subjective-active, subjective-passive or reflexive, subjective-neuter or deponent; and abstractly from its different significations it might be simply named *verb subjective*, because it is by the subjective suffixes that any word becomes a verb. The Finno-Ugric verb expresses distinctly the subjective suffixes; for instance, in the verb 'swallow' or 'devour':

English.	Hungarian.	Vogul.	Ostiak.	Finnish.
I	nyele-k	n'ale-m	nelle-m	niele-n
thou	nyel-sz	n'ale-n	nelle-n	niele-t
he, she	nyel-	n'al-i	n'ell-	niele-e
we	nyel-ünk	n'al-u	nell-u	niele-mme
you	nyel-tek	n'al-an	nelle-ta	niele-tte
they	nyel-n-ek	n'al-et	nell-et	niele-vät

Obs.—The Ostiak verb has one peculiarity, viz. it assumes *l* in the present. Take, for example, the verb 'to go':

VOGUL	mine-m	mine-n	min-i;	min-u	min-an	mine-t
FINNISH	mene-n	mene-t	mene-e;	mene-mme	mene-nne	mene-vät
OSTIAK	man-l-em	man-l-en	man-l;	man-l-u	man-l-en	man-l-et

The Ugric verb can express also the object of the verb. The Hungarian verb expresses the object of the second person by *l*, and that of the third person by *v*, *j*, *ja*, without distinguishing the singular or plural of the object. This form of the verb must be called the *objective verb*. The Hungarian verb has both a

SUBJECTIVE CONJUGATION and an OBJECTIVE CONJUGATION.

I know	tud-o-*k*	I know	(it, these)		tud-o-M
thou knowest	tud-*sz*	thou knowest	„	„	tud-o-D
he knows	tud-	he knows	„	„	tud-JA
we know	tud-*unk*	we know	„	„	tud-J-*uk*
you know	tud-*tok*	you know	„	„	tud-JÁ-*tok*
they know	tud-n-*ak*	they know	„	„	tud-JÁ-*k*

tud-L-*ak*, I know thee, you.

The Vogul, Ostiak, and Morduin[1] express the object of every person, including, of course, the object of the first, and they are capable of distinguishing also the singular and plural of the object. Take, for instance, the verb *vi* 'take,' 'bear': *vi*-m 'I take,' *vi-l-em* 'I take it,' *viäum* 'I take the two,' *viänem* 'I take the many,' *vi-n* 'thou takest,' *vilen* 'thou takest it,' *viän* 'thou takest the two,' *viän* 'thou takest the many,' *vi* 'he takes,' *vitä* 'he takes it,' *viägä* 'he takes the two,' *viänä* 'he takes the many,' etc.

The Finnish languages, properly so called (Lapp, Finn, Esthonian, Livonian, Karelian, Votian), do not possess an objective conjugation.

Hungarian has more tenses than any one of its congeners. Besides several periphrastic forms, it has a præteritum historicum and a præteritum exactum. The following exhibits the whole scheme of the Hungarian tenses, compared with those of the Vogul and Finnish:

ENGLISH.	HUNGARIAN.	VOGUL.	FINNISH.
he goes	men-	min-i	mene-e
he went	men vala (imperf.)	—	—
	men-e (præt. hist.)	—	men-i
he is gone	men-t	min-s	men-nyt
he was going	ment vala	minim oli	mennyt ole
	ment volt	minim ols	—
he will go	menni fog	minung päti	menevä oli

[1] The Sirjän, Votiak, and Permiän show but some remains of the objective conjugation.

Infinitive.

English.	Hungarian.	Vogul.	Finnish.
to go	men-ni	min-ungv man-uhv	men-nä (men-tä)

Nomen actoris.

men-ő (ev)	mini-p	mene-va, etc.

In the languages belonging to the Finno-Ugric group, the derivative forms of the verbs are in great abundance. These, however, we must pass over.

I.

Religion.

Religion is of the greatest moment in ethnology. We may properly wish to learn whether there are any remains of a common religion amongst Hungarians, Voguls, Ostiaks, and Finns.

The existence of the Finnish epic, the "Kalevala," is well known, and it may readily be supposed that some mythology may be contained therein, though the names of *Jumala*, *Ilma*, and *Ukko* are not so celebrated as those of Jupiter, Minerva, and Apollo. Very little is known about the mythology of the other cognate races; yet the name of *Tarom*, the first god of the Voguls and Ostiaks, is not altogether unknown. *Tarom* signifies in Vogul 'heaven, sky, time, greatness, and as a personification of God.' He has the same origin as the Aryan dêva-s, ζευ-ς, deu-s. His name in the mythos and songs is *Numi Tarom ažem* 'the supreme God, my Father.' In the Ostiak language his name is *Torim*. Some distinction is made in that language between 'God' *Torim*, and 'heaven' *Turum*; but etymologically *torim* and *turum* are one and the same. In the Ostiak songs (*ar-et*) he is paralleled by *jelem* or *jielem*, thus: *nium torim ažem* 'the Supreme God, my Father,' *num jelem jigem* 'the Supreme jelem, *i.e.* God, my Father.' The Ostiak *jig* (see 120) is identical with *ažo* 'father,' *jelem* seems to be identical in signification with *tarom*.

In Hungarian *terem* signifies 'fit,' 'oritur,' 'crescit,' *terem-t* signifies 'create,' *teremtő* 'creator,' *természet* 'nature.' This Hungarian word is the same as the Vogul *tarom* and Ostiak *torim* or *turum*.

In the most ancient Hungarian text we read: *Menyi milostben teremteve eleve miv isemueut Adamut* 'in how much grace *eleve* (God)

created our father Adam.' This *eleve* is generally taken for *élő* 'vivus,' and the passage is thus translated: 'in quanta gratia creavit Vivens patrem nostrum Adamum.' But it seems strange that the writer of the "Allocutio Funebris" should have omitted the proper name of God. *Eleve*, pronounced *elö, elev*, is the same as the Ostiak *jelem*, the final *m* of which corresponds to the Hungarian *v*, as in *valem, velim*=Hungarian *velő* (21); the initial *j* in the Ostiak is likewise explained by the postposition *jel=el.*

According to the Vogul mythos of creation, *Numi Tarom* let down from heaven a man and a woman, who were hanging in a silver cradle. They had a son *Elm-pi* or *Em-pi* 'son of the sky or of heaven.' This son, when grown up, creates the earth and the sea, 'mortal man' (*elm-kals, em-kals*, 'mortal of the sky'), fishes, and animals to be hunted; he institutes marriage; he teaches men how to make nets for fishing, bows and arrows for hunting; finally, he brings upon earth death itself—all in accordance with the orders of *Numi Tarom. Elmpi* or *Empi* is of course a Demiurgos. He has his representative in the Finnish *Impi*, who, as the songs of the Kalevala tell us, descends likewise from heaven into the sea, and creates the earth, isles, etc.

We have already observed that the Hungarian *em-ber* is derived from *em-gyer*, signifying 'sky-man.' *Ember* therefore is the equivalent of the Vogul *elm-kals, em-kals*, just as the Hungarian *terem, teremtő, természet*, are of the same origin as the Vogul-Ostiak *tarom, torim*, and as the old Hungarian *elő, elev*, seems to be identical with the Ostiak *jelem.*

For 'to worship' Hungarian has *áld*, 'benedicit,' 'sacrificat,' from an ancient participle of which, *áldóma*, there is derived *áldomás* 'benedictio, sacrificium.' This *áldomás* is one of the most interesting remains of the ancient religion. Buying and selling are still confirmed with an *áldomás, i.e.* a draught of wine, etc., not only amongst the Magyar, German, and Slavonian peasants of Hungary, but also amongst the Wallachians and Saxons of Transylvania. The well-known "Anonymus regis Belæ Novarius," the historian of the occupation of Hungary by Árpád and his people, finds many occasions to tell us that, having gained a victory, his heroes "fecerunt magnum áldomás," *i.e.* a sacrifice combined with a banquet.

'To pray' is in Hungarian *imádni*; the most ancient text has

vimádni. This is a compound of *vim* and *áld*. *Vim* is the remnant of the Finnish *jumala*, which in Cheremiss sounds *jum*. In this language (the Cheremiss) we find also *ult*, which is the same as *áld*, and the Cheremiss *ultemaš* 'sacrificium,' which is quite identical with *áldomás*. The Cheremiss says *jum-ult*, just as the Hungarian says *vim-ald*, *imád* 'precatur.' From *imád* are derived *imádság* 'preces,' and *imádságos* 'belonging to prayer,' *imádságos könyr* 'prayer-book.' Every Hungarian, Catholic and Protestant, when saying his *imádság* (prayers), repeats still the name of the ancient God, *vim*, *jum*, *jumala*, and sacrifices *áld* to him.

We know from the history of Christianity what great zeal was evinced in destroying the heathen gods amongst the converted nations. It is well known also that the Reformation destroyed even those remains of the ancient religion which were not destroyed by the Roman Catholic Church. So much the more, therefore, were we surprised on discovering—in several documents dated about the years 1570–1590, from Tokay, Tállya, Ratkó, etc., where Calvinism had prevailed—that the god *Ukko* still held his ground. The Finnish *Ukko* was the god of the seasons and of fertility. He was prayed to in spring, after the seed-time, and after the harvest, when corn or grain was brought in, which in Finnish is called *elo*, as in Hungarian *élet*, i.e. life. In the feast then made the *goblet of Ukko* 'Ukon malja,' was ceremonially used. The Calvinist magistrates of Tokay, Tállya, etc., at the end of the seventeenth century, in executing formal documents of buying and selling vineyards, relate with official gravity that N. present has sold to N. present this or that vineyard; and that all being perfectly concluded, "*We drank its áldomás, and the goblet of Ukko was lifted up by N.*"[1] Ukko was, according to these testimonies, with the Hungarians, too, the god of fertility during many centuries, and the lifting up of his goblet legalized public transactions.

'Seven' was a holy number with all the cognate nations; it has its place in every popular tale, where the hero generally is engaged in 'seven' (*heted-hét*) different places, or carrying on 'seven' different enterprises. The 'week' in Hungarian is *hét*, in Vogul *sât*, in Ostiak *labit*, signifying 'seven.' The idea of the week came not by the way of Christianity to the Hungarians. It is found still to this day

[1] "Mü áldomását megivók, *Ukkon poharát* felemelé N.N."

amongst the heathen Voguls and Ostiaks. 'Four weeks' *négy-hét*, in Vogul *nile sât*, make a month; *két hét*, *kit sât*, make a half-month; and thirteen months make a year, amongst the Voguls, Ostiaks, etc. This was the custom also amongst the Esthonians. 13×28 being 364, the Esthonian peasants' calendar interpolated every year a day, or, when necessary, two days to complete the year. This must have been the custom also amongst the Hungarians, for they still call the intercalary year and day *szökö év*, *szökö nap*, *i.e.* the overleaping year, the overleaping day. The periodical changes of the moon were for these nations the regulators of year, month, and week. I feel sure this also was the reason why they counted only as far as seven, and why they had not originally the decimal system. For we have seen that their words for eight and nine are compounds, signifying two minus ten, and one minus ten. It is certain that they all formed these compounds in a later time, on the introduction amongst them of the decimal system. The time when and the cause through which this happened are unknown; but it must have happened at a time when the Finno-Ugric nations had already begun to part asunder one from another, because they did not choose the same words either for eight, nine, or ten. By means of these numerals we can determine also the direction of the separation then begun. The Finns, properly so called, moved westerly, thus avoiding contact with the Turkish nations, and falling under the influence of the Germans; but, as they always kept together, the compound numbers are the same in every Finnish language. The Ugrics, who have the objective conjugation, stayed where they originally had lived, or moved easterly where they came in contact with the Turkish races. But they did not keep closely together; they became more dispersed; and hence their words for ten and the other compound numerals are not the same. By these same evidences, however, we know that the Hungarians continued to be near neighbours of the Voguls.

Taking now a retrospect of the facts before mentioned, let us ask what information they supply us with.

They tell us, firstly, that the words cited above present striking resemblances, and that, judging by them, we cannot but conclude that the great stock of the words in the Hungarian, Vogul, Ostiak, and Finnish vocabularies *have had one and the same origin.*

They tell us, secondly, that the grammatical forms also present very close resemblances, and that when we consider them in their whole importance, we cannot but conclude that the grammar of these languages has been *formed in one and the same mould.* The testimony of all the facts hitherto related here is, as I believe, of such weight that by them every language of the Finno-Ugric group can say to every one of the others: "Thou art flesh of my flesh." The languages belonging to this group form a family separated into two branches, *the Finnish and the Ugric.* This being so, how can this fact be explained? What could have been the originating cause of the common stock of words, and of the common mould of the respective grammars? The cause is found in the very long period of time during which the ancestors of the Hungarians, Voguls, Ostiaks, and Finns lived close to one another, and separated geographically from other nations speaking other languages. The modern representatives of the various branches of the family, whatever may be their present state, wretched or happy, are without doubt the successors of those ancient ancestors from whom they inherited their language. By means of the facts hitherto mentioned, we may judge also of the moral and social development of those ancestors. They were not totally uncultivated savages. They had already some domesticated animals—the dog, the horse, the sheep. But it is worthy of remark that *the reindeer had not been domesticated* by them. It was either an object of the chase only, or they were not even acquainted with it, for they have no common name for it.[1] They were hunters and fishers, but still had attained some degree of civilization. They had not only houses, but also villages, and even towns, *i.e.* places in some degree fortified. There existed amongst them a distinction between master and servant, and an established order of family life. They manufactured instruments for fishing and hunting, they knew the arts of spinning and weaving, and had a variety of clothes and garments. They had a religion of their own; they had of course also religious traditions or myths. They had songs, and a certain species of poetry, consisting in alliteration and parallelism, common to the Finnish *runo-s*, the Vogul *eri-s*, Ostiak *ar-s*, and ancient Hungarian poems.

[1] The Lapps call it *boaco* or *pocoj;* the Finns *peura, petra, poro;* the Esthonians *pödr;* the Voguls *kunnä* and *sali;* the Northern Ostiaks *kalang, kaleng;* the Southern Ostiaks *vèta, vela;* the Hungarians of course have no name for it.

They could not have borrowed the alliteration from the Germans, or the parallelism from the Hebrews, amongst whom each of these existed separately from the other; for, as far as I can see, nowhere else are alliteration and parallelism found together. The Vogul invocation runs thus: "*Numi Tarom ažem, Numi Tarom jägem*" = Supreme Tarom, my father. The Ostiak also is "*Num Torim ažem, Num Jelem jigem.*" A Hungarian adage says: "*Szegény* ember *szandokát*" = poor man's intention. "*Boldog* isten *birja*" = the blissful god governs it." The whole framework of the Vogul and Ostiak mythos is based on alliteration and parallelism, which is the poetical form also of the Finnish *Kalevala*. In general, judging from the facts shown above, we may safely conclude that the condition of the ancestors of the modern Hungarians, Voguls, Ostiaks, and Finns, could not have been much lower than that of the ancient Germans, as represented by Julius Cæsar, making allowance for the possible difference of climate.

The general result of our disquisition does not accord with several theoretical views adopted by various authors. One of these views makes a difference between *nomad* languages and *settled* languages. The Turanian languages are nomad, the Semitic and Aryan settled. To hand down languages, as the Semitic and Aryan languages have been handed down, is possible only among people whose history runs on in one main stream, and amongst whom religion, law, and poetry supply well-defined borders which hem in on every side the current of language. "Among the Turanian nomads no such nucleus of a political, social, or literary character has ever been formed. Empires were no sooner founded than they were scattered again like the sand-clouds of the desert; no laws, no songs, no stories outlived the age of their authors."—(Max Müller, Lectures on the Science of Language, 6th ed. vol. i. p. 335, London, 1871.) We may ask, when then were languages formed? And I am sure we must reply, in prehistoric times, when there could not have existed any idea of a state. Prehistoric times may differ chronologically in regard to different languages. It is possible that the Dravidians began the formation of their language earlier than the Sanscrits. It is not only possible, but almost probable, that by its geographical position the Finno-Ugric nucleus of languages was formed in a later time. But surely the formation of every language and nation falls in a time prehistoric to

its own history, when people lived by fishing and hunting, before even the beginning of nomad life.

Another theoretical view adopted generally by ethnologists, maintains that before the immigrations of the Aryan nations, Finnish people occupied Europe. The Finno-Ugric family of languages must have been in the course of formation for a very long period of time, during which the people of that race lived together, and were geographically separated from people speaking other languages. Now if the above-mentioned view had any historical ground-work, the Finnish people must have been subjected to three great inundations, viz. those of the Celtic, German, and Slavonian nations; and after having been three times overrun, it must not only have established itself once more in the rear of the Germans and Slavonians, in a continuous line from the borders of the Atlantic to the great river Oby, but must also have been able to produce epic poems like Kalevala; and even, under the name of Bulgarians and Hungarians, to become conquerors of other nations. That this could have taken place, when viewed in the light of all other facts of known history, seems to amount to an impossibility.

But a third view also has been maintained, viz. "that the very absence of family likeness constitutes one of the distinguishing features of the Turanian dialects."—(Max Müller's Lectures, etc., p. 334.) This view does not acknowledge that these numerous dialects form several distinct families, each of which has its own nucleus, which must be treated like the Finno-Ugric family. The further question, whether those different nuclei point to one common nucleus, cannot be answered in the present state of the knowledge of them we possess. The Turkish and Samojedian languages, which are geographically the nearest to the Finno-Ugric family, constitute two different nuclei, which cannot be included in the Finno-Ugric one. Every misapprehension about this must cease if one considers the Samojed and Turkish numerals, and such categories of words as are quoted above, under A, B, C, D, etc. The Dravidian languages have their source likewise in a different nucleus.

The chief argument for considering all these languages included in the Turanian conception or theory consists in the existence of what is called *agglutination*. But does not agglutination exist also in the Aryan and Semitic languages? True, it is said, the agglutination of

the Aryan languages resembles a perfect mosaic, that of the Turanian languages likes an imperfect one. It is so in many instances, but it is not so in others. On careful examination, we shall find that in this respect there exists scarcely any difference between Aryan and Turanian. The English formatives: ship, head, hood, ness, less, ly, ing, etc., are joined as looscly to the roots or trunks as any Hungarian formative. What difference can be found between *bodhami* and *πυθομαι*, and *tudok* or *tudom*? The agglutination of the latter is even more artificial than the Sanskrit or Greek. What difference again exists between the Vogul *kietves* 'he is sent,' and *missus est*?

We are told "that the idea which a Turanian connects with a plural is that of a noun followed by a syllable indicative of plurality; a passive with him is a verb followed by a syllable expressive of suffering, or eating, or going."—(Max Müller's Lectures, etc., p. 339.) The sharpest linguistic eye cannot detect such indicative of plurality in the Finno-Ugric plural *k*, *h*, *t*, or the Turkish plural *lar*, *nar*; nor could it be guessed that in the Vogul *v* (*kiet*-v-*es*) there is concealed a syllable expressive of suffering or eating. The Aryan and Semitic agglutination has been named *flexion*, and this denomination is regarded as very different to the Turanian agglutination; yet nobody pretends that Aryan and Semitic are cognate because both are flexional. Why then should or can we pretend that the agglutinative languages must be cognate for this reason alone? I cannot help declaring that the morphological classification reaches not the history of nations and their languages, which cannot be explained or understood without the study and discovery of their genealogical relations.

Another argument for the great extension of the Turanian theory consists in the *harmonic sequence of vowels*, which is best seen in the Hungarian, Finnish, Turkish, and Mongol languages; and this seems to be an argument of far greater weight than that which is founded on mere agglutination. But as the grammatical gender of the Aryan and Semitic is no foundation for any genealogical relation, so the harmonic sequence of vowels, which seems to stand in the place of grammatical gender, cannot afford a foundation for such a relationship.

Next come the compounds of the numbers eight and nine, which we find clearly in the Turkish languages (*doks-an*, *seks-än*), and even in the Dravidians (Telugu *eni-midi* 'eight,' *tom-idi* 'nine'); of which

remains are seen also in Bask (*zor-ci* 'eight,' *bedera-ci* 'nine'). But if my supposition is well founded, that the phases of the moon were the regulators of time amongst the Finno-Ugric nations, why could they not have held this office also amongst other nations whose languages were not agglutinative? Do not the Sanskrit *aštau*, the Greek ὀκτὼ, Latin *octo*, exhibit a dual, as if the number two must have had something to do with their formation? The English *leap-year* surely signifies not intercalary year, but overspringing year, which is the consequence of the existence of a year of thirteen months. The existence of compounds of the numerals eight and nine is therefore no proof of any linguistic relationship. This proof must be furnished by the forms of all the simple numerals.

Another still more striking fact is the following: the ring-finger is called 'nameless finger' in Hungarian (*nev-etlen* újj), in Vogul (*nim-tal* tulé), in Ostiak (*nem-la* luj), in Esthonian (*nime-tis* sorm), in Finnish (*nime-tön* sormi), in Votiak (*nim-tem* cini), in Morduin (*lem-ftemä* sur), in Jurak-Samojed (*nim-d'eda t'ea*), in Turkmen (*at-siz*= nameless), in Jakut (*ata-suox*=name-no), in Manchu (*gebu-akō*=name-no). How it is called in Dravidian I cannot find in Caldwell, the only source of my information regarding these languages.[1] What might have been the cause of this widely-spread term I know not; but it testifies, like the compound numerals of eight and nine, that some conceptions or ideas were not restricted to any one group of languages.

The personal, demonstrative, and interrogative pronouns cannot be adduced to prove a close relationship, because in this respect we find a surprising resemblance between the whole of the languages of the Aryan and Turanian classes. Considering this notable fact, one is inclined to pre-suppose the existence of a stage of language preceding equally both the one class and the other. And, like the pronouns, there may also be several single words, as *papa*, *mama*, etc. There may also be other visible remains of that ancient language.

Even mistakes are not wanting which have misled some authors. It may be allowed to me to point out some of these.

Max Müller cites several times a passage taken from Gyarmathy, who, after Sajnovics, first proved the affinity of Hungarian with

[1] It is called the 'nameless finger' also in Sanskrit, and the Sanskrit word has been adopted by the Dravidian languages.—*Ed.*

Finnish in 1799, and who compared the Hungarian and Esthonian verb as follows:

HUNGARIAN.	ESTHONIAN.	ENGLISH.
lelem	leian	I find
leled	leiad	thou findest
leli	leiab	he finds
leljük	leiame	we find
lelitek	leiate	you find
lelik	leiavad	they find

Gyarmathy did not know the great difference between the subjective and objective conjugation in Hungarian. He never guessed that what seems almost identical involves in reality a fundamental difference. The forms which can be compared are only:

lele-k	leia-n
lel-sz	leia-d
lel-	leia-b
lel-ünk	leia-me
lel-tek	leia-te
lel-nek	leia-vad

Those which cannot be compared are:

lele-M
lele-D
lel-I
lel-J-ük
lel-I-tek
lel-I-k

In the subjective Hungarian conjugation the third personal singular has no pronoun or personal exponent; the Esthonian has *b*. But the exponents of the objective conjugation cannot be expressed in Esthonian.

Caldwell, treating of the Tamil plural, says:[1] "In modern Tamil *mar* is suffixed to nouns signifying parents, priests, kings, etc., as a plural of honour, like the Hungarian *mek*." The Hungarian reader is astonished by this *mek*, which has never existed. Where could Caldwell have found it? In Bunsen's "Outlines of the Philosophy of Universal History," where Max Müller, in his letter about the Turanian languages, mentions the Kanarti plural *andir* of cognation, quoting Gyarmathy too: "Habent autem tam Hungari quam Lappones

[1] A Comparative Grammar of the Dravidian or South-Indian Family of Language, p. 191. London, 1856.

præter pluralem hunc (with *k*) etiam *alium pluralem numerum, qui non in omnibus observatur vocibus, sed tantum in nominibus cognationis* (Lapponum *čeh*, Hungarian *mék*). Duplicem hunc pluralem Hungari possessivis tantum nominibus tribuunt, Lappones vero nominibus cognationis simplicibus." Of course Max Müller means, this Lapponic plural might illustrate the Kanarati plural *andir*. The case is this: In the Finnish language, *e.g. velji* signifies 'brother,' *veljekse* 'one of the brothers,' plur. *veljekset* 'Gebrüder.' The Finnish form *veljekse* sounds in Lapponic *velječ*, in plural *velječek* or *velječeh*. The plural, therefore, is the common exponent *k* or *h* joined to *velječ*. The Hungarian says, e.g. *atyám* 'my father,' *atyámé* 'my father's thing;' to this is joined the common plural *k*, *atyamé-k* 'all belonging to my father.' We see that neither in Lapponic nor in Hungarian is there any such plural form which could be compared with the Kanarati *andir*, or the Tamil *mar*, and Gyarmathy was greatly blamed for taking *mék* for a plural formation.

Caldwell (p. 427) says: "The present infinitive of the Finnish is apparently identical with the Dravidian, being also in *a*, e.g. *oll-a* 'to be'; but it appears probable that this *a* was originally preceded by a nasal, for the corresponding Esthonian infinitive is *ollema*, and the sign of the infinitive in Hungarian is *ni*." To show the mistake, we must put here the Finnish and Hungarian forms of the infinitive.

In Finnish one infinitive is in *ta*, not in *a*, the other is in *ma*; both forms are common to Finnish and to Esthonian; e.g. *ol* 'to be,' with the exponent *ta=ol-ta*, by assimilation *olla*; with the exponent *ma=ole-ma*, both in Finnish and Esthonian.

In Hungarian the one infinitive is in *ni*, differing from the Finnish, but resembling the Vogul *ng*; the other is also in *ma*, but exists only in derivatives. For instance, from *tud* 'to know,' we have the infinitive *tud-ni* 'to know,' and the unusual *tudoma*, the derivatives of which are *tudomá-s* and *tudomá-ny* 'knowledge,' 'science.'

Therefore Caldwell was mistaken in stating that any resemblance existed between the Dravidian and Finnish infinitive.

The same author writes (p. 291): "The Dravidian numerals are almost as closely allied to the Finnish as are those of the Magyar itself." And why does he suppose this? Because he found that in Votiak *og* signifies 'one,' like the Telugu *okä*, and *nala* is 'four' in Tamil. With the Greeks "one swallow made not spring," and I

think that in this instance two swallows will not make spring. However, we must see also whether the pretended bird is really a swallow. Now the Votiak *og* is explained by the Vogul *akv, aku,* which on its side is explained by the Finnish *yht.* A standard rule in comparing words must be always this: the fullest forms must be taken as the basis of comparison. Taking the words as they stand, the Telugu *okä* and the Vogul *aku* seem similar; but if we wish to attain to certainty, we must seek for the original forms of both, and if we cannot find them, we must delay coming to a conclusion. As far as I can see the Ugric and Dravidian numerals, I cannot detect between them any resemblance which seems more than fortuitous.

A surprising analogy between Dravidian and the Morduin and Samojed appears in the *appellative verbs*, as they are called by Caldwell, e.g. *kón* 'king,' *kónên* 'I am king,' *kónei* 'thou art king,' etc.; *kónin* 'of the king,' *kóninên* 'I am the king's (man),' *kóninêm* 'we are the king's (men),' etc. But morphological resemblance is quite different from genealogical relationship. The New-Persian is able to say from *merd* 'man,' *merdem* 'I am a man,' etc.

Very strange mistakes are to be found in "Etruscan Researches," by Isaac Taylor, out of the number of which I quote one, and surely not the strangest, by which the Etruscan *leine* is explained as follows. The correspondencies may be thus exhibited:

ETRUSCAN	l	ei	n	e		he lived
HUNGARIAN	l	e	nn	i		to be
HUNGARIAN	l	e	n	y		existence
TURKIC	ol	a	n			being
FINNISH	el	e	n	da		life
VOGUL	ol	a	n	t		life
LAPP	l	ei				he was

Here we find three different verbs compared with the Etruscan *leine*, and of these verbs different tenses and moods are taken. The verbs are:

1) *le*, a defective verb substantive in Hungarian, Finnish, and Lapp, the equivalent to which in Turkish is *i-mek* (ايمك), not *ol-mak*. The Hungarian *lenni* is for *lev-ni* 'to be,' and cannot be compared with the Lapp *lei* 'he was,' for to this corresponds the Hungarian form *leve* or *lön*. The Hungarian *leny* is a new formation, like the English *bus* for *omnibus*, which *bus* would be a very curious tool in comparative linguistic science.

2) *ol* 'to be,' the equivalent to which is the Finnish *ol*-ta, the Hungarian defective *val*, the Vogul regular verb *ol*, and the Turkish *ol*-mak. Now with the Turkish *olan* 'existing, being,' the Hungarian *való*, the Vogul *olne*, the Finnish *oleva*, are to be compared, but no one of the adduced forms.

3) *el* 'to live.' From this is derived the Finnish *eläntä* (*elenda* is a corrupted copy) 'life,' to which corresponds the Hungarian *élet*, without nunation. The Vogul *olant* is perhaps a corrupted form taken from Klaproth, whose linguistic *ἀκριβεια* is very small, and who must never be cited when a perfectly accurate form is required.

As an instance of a strange method, may be cited the derivation of the Etruscan numerals imagined by Mr. Taylor. He supposes that finger, hand, or arm, and eye, were the source for the sounds of numerals. A lifted finger must be one. Now, continues he, *parmach* denotes a finger in seventeen Tatar dialects, hence *pir*, *per*, *bir*, is 'one' in the Turkic family; the Finnic languages took the other half of the word, the *mach*, losing the *m*, and we find there *aku*, *akt*, *egy*, etc. Therefore the Etruscan *mach* is 'one.' If by lifting a finger the numeral one was formed, we might suppose that the lifting of two fingers must have formed the numeral for two. But Mr. Taylor finds that "finger, hand, eye is perhaps a way of counting one, two, three, as natural and convenient as finger, hand, foot." Hence he imagines that in any language where there are two primitive words denoting *hand* or *arm*, one of these will be almost certainly used to mean *five*, and the other to mean *two*. The whole chapter treating of the numerals affords a striking example of a method which should not and cannot be applied anywhere; for on this way the play of the imagination is unchecked.

I hope, by all which we have hitherto seen, it will be undoubtedly clear that the genealogical method of studying languages, which has alone produced the linguistic science of Aryan and Semitic, must also be applied in the study of the Turanian ones. Nothing caused a greater mischief in respect of these than one view of the current theory about Turanianism, which holds that the genealogical method of studying were not fit for these languages. In contrast to it, I hold that the genealogical method must be fit for every language which points to a common nucleus with other languages; and where that seems impossible, there our knowledge is insufficient. Now, if this

insufficiency is only a subjective one, we must study the facts so much the more, till we might gain a sufficient knowledge about them, before we hazard any general theory. But if the facts by themselves are sufficient, let us gather them together as rarities, put them in our museum, and, without theorizing, wait for further information. There cannot exist any language without history, or the people speaking it must be the most degraded of human beings. Perhaps the existence of such a people is possible; but, if so, what a great mistake it would be to take such a people and such a language for a basis of any general theory.

Taking for granted that the genealogical method of studying languages must be applied to the investigation of the Turanian too, we may be well aware, in the mean time, that grammars made with the apparatus furnished by the genealogical method are still not to be had on many languages. What was not existing some short time ago on languages which were studied the most during many centuries and by all civilized nations of Europe, we cannot expect to find it yet made on languages which have not the privilege of being cared for by the whole of learned Europe. The material for the comparative science of languages is to this very day scanty and defective. The greatest part of existing grammars and dictionaries is made without any knowledge of the genealogical method. In our days this method begins to prevail in many literatures; but the new and better works are generally written in the respective languages, which causes a new difficulty. But, be it as it is, only grammars written in view of the genealogical method can furnish fit materials for the comparative study. An instance may be adduced for illustration. I know that the Bask and Finnish question claims interest English literature. I read last Saturday, in some Review, that this question is already placed beyond all doubt. Therefore, in the opinion of the writer of this notice, the relationship between these two languages is already determined; consequently the relationship too, which existed in prehistoric times between Bask and Finnish, has assumed a certain definite shape. We see the question is of very great moment, both for linguistics and for ethnology. But I ask, is the Bask language yet studied in view of the genealogical method, as the Finnish is actually studied by Wiedemann, Ahlquist, and Donner, in St. Petersburgh and Helsingfors? And the Bask scholars,

are they well acquainted with the studies of the Finnish scholars? Perhaps it is so, and I should be very glad if it be so: I could learn much from them. For, comparing the Bask and Finnish verb, comparing the numerals of both languages, and such categories of words as I have exposed here, I still confess that the Bask and Finnish question, so far as I can see, is by no means determined.

Surely I must now have tired this honourable assembly. I therefore finish now, vindicating once more the genealogical method for the study of Turanian languages.

THE

STATE OF THE CHINESE LANGUAGE

AT THE TIME OF THE

INVENTION OF WRITING.

By the Rev. J. EDKINS, D.D.

Section 1.—*Time of the Invention of Writing.*

The time of the invention of Chinese writing is said by native writers to have been B.C. 2300. Can we rely on them? On what trustworthy traditions do they base their belief in this fact? Their oldest books profess to come from B.C. 1100. But in them are portions which are older. There are poems of the Shang dynasty B.C. 1700 to B.C. 1100, and historical records of that and the Hia dynasty which preceded it, and stretched over four centuries, which date, therefore, from 2100 to B.C. 1700.

As might be expected, these old historical records have lacunæ. Some portions bear marks of later manipulation. In the Han dynasty, after the burning of the books, there was great zeal in restoring the classics exhibited by prince and people. Temptation was strong at that period to invent and to gain credit and currency for old writings. Doubtful paragraphs and chapters would at that time readily attain the character of genuineness. To detect the newly-added passages, has been a favourite subject of criticism in the

present dynasty. There has been a good amount of success in separating the old from the new.

We are not called on to take sweeping measures however. To reject the whole of the writings which the Chinese ascribe to a time earlier than B.C. 1000, would be too revolutionary. They do not bear a very mythical looking character. Some incidents look extremely unlike the work of an inventor. The positions of the stars which mark the equinoxes and solstices are not what would have been assigned in the Han dynasty. The Emperor Yan would not, at a later age, be made, I suppose, to give at the same time his two daughters as wives to his successor, the Emperor Shun. This incident would not be invented by any Han writer.

Some English writers, such as Dr. Legge and Mr. Chalmers, while adopting the sceptical side on this question, have not perhaps sufficiently considered the force of the argument from linguistic development. Changes in language take a long time to effect. The period assigned by the Chinese to the invention of writing does not seem too ancient, if we duly estimate the alterations that have taken place in the language. In the absence of secure chronological data, we may employ as a test the rate of slowness which marks the progress of variation in the language. To serve this end we may, for example, conveniently select the twelve hundred years that have elapsed from the time of Hiuen Tsang, the Buddhist traveller and translator from Sanscrit, as a period which admits of sharp definition, and has included in its range some most important linguistic changes.

SECTION 2.—*State of the Language* 1200 *Years since.*

There is this advantage in taking Hiuen Tsang's time as an epoch. He was a translator from Sanscrit, and wrote with Chinese characters many Sanscrit names.

In his time there were four tones, each of them well marked. There are now five, the first having become divided into two. Chinese investigators into their own language tell us, that in the rhymes of the Book of Odes three tones are all that we can find traces of. This seems to be quite such a statement, based as it is on a thorough examination of the data for forming a judgment, as we can accept.

Taking this mode of estimating the rate of linguistic change, we have furnished to us two epochs of tone formation:

The *hia p'ing* tone	belongs to	A.D. 1800.
,, *ch'ü* ,,	,,	A.D. 1600.
,, *shang* ,,	,,	B.C. 600.

If we follow this method of testing linguistic growth, we are taken back to B.C. 1800 years as the time when the language began to tend towards tonic development. For the distinction between the two remaining tones is alphabetic, being that between mute and nasal, or vowel endings. Over the whole of China, at present, there is a distinction maintained by tonic pronunciation between the two classes *shang* and *hia*, into which the first tone is divided. This distinction was unknown in Hiuen Tsang's time. The change then has been very thorough, and it has been accompanied by various other radical changes, extending through many parts of the pronunciation and grammar. During this time the initial sonant letters have disappeared from four-fifths of China, and the final mutes *k*, *t*, *p*, have also been lost from two-thirds of China. The sonant initials have been changed for surds, and the final mutes have been dropped altogether.

Thus the dictionary Kwang yün, 1200 years old, gives the syllables *bat* and *bak*. But these will be called *pa* or *pai* or *pe* by the northern or western Chinese of the present day. The old sonant *b* has been thinned off into *p*, the *t* and *k* dropped, and the vowel lengthened or modified. In Canton and Amoy they will be called *pat*, *pak*.

Fortunately, in the Kwang yün, the syllables are divided according to their initials. *B* and *p* are not confounded; they are kept carefully apart. So with *g* and *k*. So with *d* and *t*. The proof is in a nutshell. We have here a sure stepping ground in our backward search into the early condition of the Chinese language.

F and *ch* are both new letters in the Chinese natural alphabet. They were, as we learn from the Kwang yün, coming into use when that dictionary was compiled. At that time there was no trace whatever of the modern coalescing in Mandarin of *h* and *s*. This coalescing means that the letter *h* before the vowels *i* and *ü* is fast taking the sound *s*. This remarkable and important phenomenon is the converse of the Greek and Celtic change of *s* to *h*. It is

registered in no book of the Ming dynasty, and therefore ought to be regarded as not more than two centuries old.

For the pronunciation of 1200 years ago there is no better guide than the Kwang yün; and having this book, there need be no difficulty felt upon the state of the pronunciation at the time it represents.

The same period has witnessed the upgrowth of the modern Mandarin language. It differs much from the old literary style; and is probably diverging from it more and more as time goes on. The earliest Mandarin books are not more than 600 years old. Authors of the *Sing li* philosophy were the first to write in it, the celebrated Chu hi being among them. These men wrote in two styles, the classical and the Mandarin. Their motive in choosing a colloquial style was a consciousness that they had important thoughts to teach their pupils, and that thought is superior to style. The reading public of China needed to be convinced that thought ought to be expressed in simple language, its value being in itself, not in its costume.

The philosophers were followed by romancists and play-writers. Their usage tended to lower the Mandarin language as a literary style. The moral philosophers, by their employment of it, did less to elevate its claims than the writers of fiction did to diminish its honours. During the two dynasties that have ruled China for the last five hundred years, the ancient style has prevailed, as it does at present; and the Mandarin style has failed to acquire any high position in the esteem of scholars.

Yet the Mandarin language, as a spoken medium, has lived and grown with no check and with no foreign admixture. It is distinguished for more fulness, exactness, and clearness than the book language. Among the various *patois* of China it is the best for sweetness, intelligibility, and general adaptedness. Spoken by 200,000,000 of people, and remarkable as it is for flexibility and extent of phraseology, it has made scarcely any progress as a literary medium. Yet this is a matter of taste and of fashion. The old book language was once vernacular. The difference between it and the Mandarin is a difference between an old and new colloquial. The book language was once as much on the lips and in the ears of the people, as the little-esteemed Mandarin of to-day.

During the Han dynasty there was a rich development of native literature, especially in the departments of history, poetry, diction-

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aries, and classical criticism. Important works on physical philosophy, alchemy, astronomy, and the first Buddhist treatises, date from that time.

It was an age notable for archæology and thorough scholarship. As an instance, let me refer to the Fang yen. This book, made when the Chinese had not learned to spell, is a collection of synonyms from existing dialects. Every dictionary of a language is, in fact, very much the same thing. It is a book in which one word is explained by others having the same meaning. This is specially true in Chinese, where knowledge is limited chiefly to one language.

In the Fang yen, let the words for 'great' be examined. We have *mok*,[1] *dim*, *gut*, *dap*, *kok*, *get*, *tok*, *pong*, *tong*, *kang*. *Gut* was the favourite in the kingdoms Tsi and Sung. Each word had its locality; each region had a special fancy for some one term. Thus synonyms became numerous, and, while a certain predilection reigned among scholars for particular words and turns of expression, the dialects were ruled by a local liking which tended to keep certain expressions current for a longer time than the use of scholars would have permitted.

When we arrive at the Han dynasty, the syllabic spelling of the Kwang yün fails to be useful to us. Kwo p'u seems to have been the first to employ it, and he belonged to the fourth century. In his time we can judge of the existing pronunciation by his spelling. Before his day there was no idea among the Chinese literati that a word was divisible into letters. Alphabetical analysis was as strange to them as the analysis of water, or air, or light, to Western chemists before the discoveries of modern science. Our only sources of inquiry as to ancient sounds in older times are the rhymes of poetry, the use of characters for each other, and the phonetic principle in writing.

Section 3.—*State of the Language in the Time of Confucius.*

I now proceed to the era of Confucius. Great maturity marks the language as it was in the Chou and Ts'in dynasties from B.C. 1100 to

[1] Should any one be surprised not to meet with the common Indo-European root *mag* in Chinese, Mongol, or Japanese, he will find it in this old book, viz. *mok*, above given.

B.C. 200; and that time or its middle point, B.C. 650, may be taken as a convenient way-mark for testing the progress of development.

The writers of that age were in possession of what is called the *Ku wen* as their medium for expressing their ideas in a written form. That this was not identical with the colloquial language of the day may be argued from the fact that the founder of the *Wen chang* or modern literary style, and the founder of modern poetry, both lived within that period. Tso kieu ming, whose amplification of the Ch'un ts'ieu of Confucius has been recently translated by Dr. Legge, is greatly admired as a master of style. His book is used as a guide-book in the art of sentence-making, in the effective use of particles, in judiciousness of grouping, and in a vivid and pictorial arrangement of facts in a narrative.

But in attaining this excellence it is manifest that he was refining upon the popular language, and helping to found a new style. He must be regarded, then, as an epoch-maker in the development of the book language. Under him it began to diverge more widely than before from the colloquial style. In proof of the existence of dialects in the time of Tso kieu ming, reference may here be made to some dialectic words which have been pointed out by Legge. In proof that the book language was once colloquial, it is sufficient to refer to the more popular of the Odes. They must have been in the language of the common people.

The poet whose appearance helps to mark a great turning-point in the development of the literary language was C'hü yuen in the third century B.C. Under his hands the ancient poetry, which was thoroughly colloquial, became more cultured. Instead of being the simple outflow of feeling, put into words bearing a rhythmical form but colloquial, poetry became distinguished for a specially ornate phraseology. The poems which Confucius collected were vernacular, or chiefly so, and differ in this respect from those of C'hü yuen.

The existence of the Er ya and other dictionaries of archaisms published in the Cheu and Han dynasties, is of itself a proof of the fact that Confucius looked back on a lengthened time of literary antiquity preceding his own. It had then become necessary to explain old words. Obsolete names were constantly increasing in number. The language was stereotyped in its characters, but the living words which those characters represented were constantly

changing, as in all languages. Many of their modifications in sound were so prominent to the speakers that they felt prompted to make a change in the character, or originate a new one. No new words were introduced. All that appear to be such are merely old ones transmogrified.

Hence new characters arose which to some extent chronicled the successive changes that occurred in the history of words, as they acquired new senses, abstract or concrete, or lost old ones. There can be little doubt that 此 *t'sï*, 斯 *sï*, 茲 *tsï*, 之 *chï*, 是 *shï*, all having the meaning *this*, are modifications of a single demonstrative.

The way in which writers of the time of Confucius, or earlier, allude to ancient times, is instructive. When they speak of their history, they look on it as real, and there is such a substratum of solid fact in it, that it seems correct to look on much of it as real rather than mythical. They were men without any great amount of superstition; with as little as has been possessed by the learned of any ancient nation: *e.g.* Tso explains that a comet is not a portent of evil. Confucius had indeed a veneration for the past, which in a superstitious age might have misled him; but in a practical, thoughtful, critical, and learned time, such as his time was, would be less likely to render his judgment erroneous. There is no doubt that he looked at the facts of the Shang dynasty as truly described in the Shu king. He traced indeed his own genealogy to the imperial house which then ruled China. In regard to the Hia dynasty, his praise of its calendar, and his allusion to the costume that then prevailed, should be allowed to imply not only the existence of that dynasty, but the possession of books which described with a certain minuteness the condition of China at that time. But this implies that writing was in use in the Hia dynasty, that is, in the period extending from B.C. 2100 to B.C. 1700. This agrees very nearly with the time for the origin of writing asserted by the Chinese, viz. B.C. 2300. The existence of a calendar implies the existence of the art of writing.

The age previous to the time of Confucius witnessed the production of the poems embodied in the Shï king and in the Stone Drums, recently translated by Dr. Bushell. All the odes of those times are in rhyme, and therefore contain evidence as to the state of the language when they were written. Thus, the final consonants were *ng*,

n, *m*, *k*, *t*, *p*, as in the Canton and Amoy dialects at present. In those dialects there are some irregularities, which may be corrected by the tonic dictionaries and the poetry. In the rhyming consonant finals, if we wish to know which is right, when the usage of the dialects or of the poems is observed to differ, an umpire will be found in the tonic dictionaries, by whose decision we may prove the dialectic usage to be irregular.

It is a great step in our researches to know that the six final consonants assert themselves beyond contradiction in the rhymes of the Shï king. It also appears by the same authority that there are perhaps 100 common words which had the finals *k*, *t*, or *p* in B.C. 800, but had lost it in A.D. 600. Thus we learn that during the time of Confucius, of Ts'in shï hwang the conqueror, and of Sï ma t'sien the historian, one important tendency of the language was to drop its final mutes. We also learn that in those times there was no such great revolution proceeding in the language, in regard to final letters, as during the period from A.D. 600 to the present time. The phonetic elements of the language were then in a state of comparative steadiness and quietude, anterior to the great changes afterwards to occur.

SECTION 4.—*The Chinese Writing as a Body of Characters is an Index to the State of the Language at the Time it was Invented.*

The phonetic principle in the formation of characters is based on identity of sound in the words written with the same phonetic. Just as final *k* rhymes uniformly with final *k* in the old poetry, so *k* in the phonetic part of characters where it appears as a final keeps its place in the same phonetic in all characters formed from it. For example, in the inscription on the third of the Stone Drums, 樂 *lak* 'pleasure,' rhymes with 陸 *lok* 'dry land,' here used for 'sword,' and also with 赦 *siak* 'let go,' 射 *shak* 'to shoot,' and some other words. *K* final therefore existed in the sound of these words in north-western China 2600 years ago.

So the words 馬 *ma* 'horse' and 罵 *ma* 'to revile' are known to have had the same sound at the time of the invention of writing, by their being written with the same phonetic. In this case the phonetic is a picture of a horse. Sometimes the origin of the phonetic is not known. Thus from the use of the same phonetic in 祿 *luk*

'wealth and honour,' and 綠 *luk* 'green,' we learn in the same way that *k* existed in both these words. The *k* now found in 白 *bak* 'white,' was also there when the characters were invented about B.C. 2200 (as I think), in the words written with the same phonetic, 百 *pak* 'hundred,' 伯 *pek*, the third title of nobility, the *beg* of the Turks, who received it from China in the Han dynasty; in 白鬼 *p'ak* 'the animal soul,' and 怕 *p'a* 'fear,' where it has been since lost. The character for 'white' was first invented and called *bak*, which was the common name for the colour at that time. 'Cypress,' 'animal soul,' the 'third title of nobility,' 'fear,' 'hundred,' 'to assist' 弼, 'blue,' 'azure,' 'green' 碧, 拍 *p'e* 'to strike with the hand,' 帕 *p'a* 'a napkin,' 迫 *pe* 'pressing' 'urgent,' 舶 *pe* 'a ship,' 粕 *pe* 'dregs of wine,' were all written with this character, or that for a hundred 百, only differing from it by a stroke. An appropriate ideographic element is added. The radical *hand* is added for the sense of 'striking,' *rice* for that of 'wine dregs,' *walking* for that of 'urgent,' and so with the others.

The existence of final *t*, final *p*, and the finals *ng*, *n*, *m*, may be shown in the same way. Thus 林 *lim* 'forest,' is used in 霖 *lim* 'water dropping.' So also 覃 *dam* or *t'am* 'reaching,' 'extending to,' is used in *t'am* 'deep,' sacrifices offered seven months after the decease of parents, to 'feel with the hand,' to 'think,' to pay beforehand for things bought, to 'talk,' a 'dark-coloured horse,' 'edge of a sword,' 'take into the mouth greedily.' Each meaning has its appropriate ideographic sign, viz. water, sacrifice, hand, heart, ancient shell money, viz. 貝 *pei*, words, horse, metal, mouth.

Thus the same sort of syllabic constitution belonged to the language when the writing was invented as now. The Canton and Amoy dialects also are seen by this process of proof to retain at the present day the final letters which existed so many ages ago. The Chinese characters furnish their own key in a manner most satisfactory and convincing.

But there was a past in the Chinese language anterior to the invention of the characters. Its words were undergoing changes at an earlier period. It would be a very interesting result if we should be able to find out what alterations in the syllabary were silently proceeding (*e.g.* final *p* to final *m*) at the time the characters were made; and also, if, from the evidence furnished by the words themselves, we

should be able to learn what changes had completed their course, or nearly so, before the characters were made (e.g. *d* to *s*, *sh*, *l*). To show what can be done in this field, I must proceed to letter-changes.

The appearance of *ch*, *f*, and *h*, was probably subsequent to the formation of the characters. *Ch* comes from *t* and *d*. *F* comes from *p*. *H* comes from *k*. When did these three changes take place? In the Amoy and Tiechiu dialects we find evidence that they are still proceeding. The Mandarin 折 *chai* 'to break,' 治 *chï* 'regulate,' 'heal,' 茶 *c'ha* 'tea,' 中 *chung* 'middle,' 勅 *ch'e* an 'imperial order,' 暢 *c'hang* 'joyful,' 'extending,' 潮 *c'hau* 'tide,' are in the Tiechiu vocabulary *ti'a* 'break,' *ti* 'rule,' *te* 'tea,' *tang* 'middle,' *t'ek* 'imperial order,' *tiang* 'joyful,' *tie* 'tide.' The tonic dictionaries also give *t*, *t'*, and *d* as the initials of these words. Now let it be considered that in the phonetics there is no appearance of any difference between *ch* and *t*. Nearly 300 phonetics are now found with the initial *ch* occasionally occurring. Most of them have also the initial *t*, either in Mandarin, or in the Amoy and Tiechiu dialects, or in the tonic dictionaries. The direction of change is always from *t* to *ch*, never from *ch* to *t*. The further we go back, the less do we find of *ch*, and the more of *t*. Under the Han dynasty, the Turkish word *Tengri* for 'Heaven' was transferred into Chinese by a character now pronounced *Ch'eng*, but then evidently called *T'eng*. Pan ku, the historian of the Han period, has preserved this word. In the Book of Odes, where natural sounds are frequently written phonetically, it is advisable always to change the Mandarin *ch* to *t* or *d*. Going back to the time of the invention of writing, there is no proper place among the phonetics for *ch* as an initial. *T*, *t'*, and *d* meet the requirements of each phonetic much better, as will be found by trial.

A special advantage we have in examining Chinese sounds is the limitation of the field. The monosyllabic type has never been interfered with. The primitive monosyllable is a monosyllable still. The intrusion of *r* and *l* after the initial mute, so common in European languages, is still a future possibility, and no more, to the speaker of Chinese. These facts lend to the language a wonderfully primeval aspect, which should attract to it the earnest study of all who are interested in the examination of the oldest facts in human speech. On this account the appearance of certain letters in the syllabary for the first time assumes in Chinese a special importance. This gradual

appearance of new sounds can be more exhaustively studied and more easily mastered where the syllabary is so limited as in Chinese, than in the complicated syllabaries of the West. For example, *f* occurs in late Chinese, never it would seem in early Chinese. As with *ch*, the further we go back, the more frequently is the modern *f* resolved into *p*. Thus *Fo* for Buddha is *Put* in Amoy 佛. Where this character is used in the Odes, the native critical scholar tells us to call it *but*. *Feng* 'wind' was anciently *bam*. For the negative *fei* 非 'it is not,' 匪 'a bad person,' 誹 'to speak against' 'slander,' 弗 *fuh* 'not,' 咈 'to oppose,' 'act perversely,' 'contradict,' embracing two phonetics, we have 不 *put* 'not,' as an equivalent. But 不 *put* 'not' is also called *feu* in 否 'is it so or not?' If we look on the sound as originally *put* or *pit* in all cases, and upon *f* as a derived initial much later in time, we obtain a solution of the problem. If we then take any of the numerous phonetics which are used with the initials *p* or *f* indifferently, we shall find that the circumstances will be best met by the hypothesis that *p*, *p'*, and *b* existed at first, but not *f*. In Morrison's Dictionary the cases where *f* and *p* are attached to the same character in the directions for pronunciation are numerous. All such facts tend in the same direction. The late appearance of *f* is shown by dialects, by old dictionaries, and by phonetics. The proof is not absolute, because we cannot adduce it in every case; but it is cumulative and of great strength, and therefore deserves full recognition.

The true history of *f* as a letter of late development is obscured in some languages by the fact that it sometimes occurs irregularly; for example, in place of *g* in *cough*, *laugh*, and other English words. Such a change cannot be said to belong to the great track of letter mutation, for it is local and limited. The Chinese fact of *f* proceeding from *p* is according to a wide law, which may be seen operating on an extensive scale, not only in Chinese, but elsewhere, as in Hebrew, for example.

The third case is that of *h* from *k*. Just as in the change of *t* to *ch*, and *p* to *f*, recent facts show that these are processes still going on, so is it with *h* from *k*. In Amoy and Tiechiu 行 *hing* 'to walk' is *kiang*, 吸 *hi* 'to breathe' is *k'ip*, 繪 *hwei* 'to paint' is *kwai*, 隙 *hi* 'crevice' is *k'ia*, 況 *hwang* 'still further' is *k'wang*. When the Hindoos transcribed the name Ganges into Chinese, they chose a

character 恒 *hêng* 'constant,' which has *h* at present in all accessible dialects. But three centuries afterwards, in Hiuen Tsang's time, it was changed for a word whose initial was *g*, and is now *k'*. Thus it seems plain that 1400 years ago *k* was rapidly changing to *h*.

In the phonetics we find *k* and *h* undistinguished. There are as a rule no phonetics with initial *h* which have not also a value *k*. Thus 王 *wang* 'king' has the value *h* in 皇 *hwang* 'imperial,' and *k* in 匡 *k'wang* 'a basket.' By analogy *h* has here proceeded from *k* or rather *g*, as will soon be explained, and the phonetic element now pronounced *hwang* has changed its initial *g* into *h*, and dropped it in *wang* 'king'; 皇 *hwang* and 王 *wang* being, as is probable, originally one word. In south-eastern China *h* in *hwang* is usually not heard.

Another change which has taken place since the invention of writing is the transition of sonants to surds. *G*, *d*, and *b* have become *k'* or *k*, *t'* or *t*, and *p'* or *p*. These initials are always kept separate in the old tonic dictionaries. The key to the pronunciation of these words is found in the Old Middle dialect, viz. that of Shanghai, Ningpo, Sucheu, and Hangcheu. The Hindoo and Chinese translators of Buddhist books adhered as a rule to the use of the Old Middle *g* for *g*, *k* for *k*, *d* for *d*, etc.

We can watch the process as it is now going on in the dialects of the border-land between the Mandarin and Old Middle dialects. *G* in the lower first tone becomes *k'* aspirated in Mandarin, but in the lower second, third, and fourth tones it becomes pure *k*. Thus, undoubtedly, by a most extensive law still in visible operation, the aspirated series and the pure surd series both flow out of the sonant series. The action of this law constitutes a sort of Grimm's Law for China, and in a way that is now open to observation. Probably the theory of Grimm's Law in Europe may be made more complete by comparing with it the working of a like law in Eastern speech.

Then the question occurs, what was the state of the alphabet as regards surds and sonants at the time of the invention of writing? Some phonetics are predominantly surd, *e.g.* 巠 *king* 'a stem,' 'a foot-path,' 'the neck,' 'transverse,' 'to pass over,' 'streams,' and (with the aspirate) 'light in weight.' Some phonetics are mixed, as 敬 *king* 'to honour,' 'to guard against,' 'feel cautious,' but with *g* 'to raise with the hand.' Compare the phonetic of 過 *kwo* 'to pass,' 禍

hwo 'calamity' (*h* sonant). Some phonetics are predominantly sonant, *e.g.* 華 *hwa* 'flowery.'

It must however be maintained, that although surd and sonant were distinct at the time of the invention of writing, the same phonetics were quite commonly used to express both. There was no binding necessity upon the inventors to apply one set of phonetics exclusively to words having surd initials, and another set exclusively to words having sonant initials. Thus 弟 *ti* 'brother,' has initial *d* with the sense 'brother,' 'brotherly regard,' 'sister,' but the aspirated *t* with the senses 'ladder,' 'weep,' 'shave,' 'tears,' and some others. If we could find no trace in the language of these words having changed their initial from *d* to *t* aspirate since the invention of the phonetic, we should be obliged to conclude that the phonetic was used irregularly. It is possible however that, with a fuller knowledge, this irregularity may disappear. For example, when we find a word 'to weep' pronounced *di*, and another called *t'i*, it is possible that the last may have been changed from the former.

The initials *w* and *y* were at the time of the invention of writing in many cases *g* (or *k*) and *d* (or *t*). Thus 也 *ye* 'also' was *dap*, as in 地 *ti* 'earth,' 施 *shï* 'to give,' 𠂤 *yi* name of a savage tribe, 池 *c'hï* 'a lake,' where the initial is reducible in all these words to *d* or *t* and the final to *p*. This seems clearly to be a change subsequent to the invention of writing. *Ye* also thus connects itself with the verb 搭 *ta* 'to touch with the hand,' 'connect.' *Shï* 'give' should be compared with *chï* or *tip* 'a present,' written 執 and also meaning 'hold in the hand.' In the Chwen character we have for *ye* 𠀧, for *shï* 'give' 𠀧, for *ti* 'earth' 𠀧, for *c'hï* 'lake' 𠀧, for *t'o* 'to draw' 拖 we have 𠀧, for *she* 蛇 'serpent' 𠀧. Here we see in the Chwen character the phonetic *she* 'serpent,' and *t'o* 'to draw,' agreeing with that of *c'hï* 'lake.' *Dap*, *t'ap*, or *tap* seem to be the ultimate root of all such words.

Does any one doubt whether the modern syllables *she*, *shï*, *ti*, *t'o*, *ye*, *yi*, can be all represented by the one syllable *dap* as their common source? Let him consider that *yi* with the radical for words 詑 *yi* 'self-sufficiency,' 'loquacity,' 'boast,' has in dictionaries the three sounds *yi*, *shï*, *to*. Compare also 泄 *yi* 'spread out,' 'disperse,' also called *sip* 'put away,' 'flow out,' and 洩 *yi* 'expand,' *sip* 'desist,' 'flow away.' Here we see evidence of *s* by some process becoming

y. The principle is the same. Throughout the Chinese vocabulary *s*, *sh*, *t*, *d*, *l*, *ch*, *ts*, are closely related, and easily run into one another. To 'remove,' 'extend,' is either 𠂤 *yi* 'remove to' a higher degree, or 施 *yi* 'remove,' 'extend to' (also *shï* to 'give'), or 移 *yi* 'remove grain,' 'change,' 'remove,' or 扡, or 迤 *yi* 'remove.' With it is probably connected 弛 *shï* 'relax a bow,' 'let go.'

The ideas 'profligate,' 'boast,' 'insult,' 'to be loquacious,' are found with the phonetics 多 *tap*, 也 *dap*, 它 *t'ap* or *dap*, 世 *shï* 'age,' as in the words 詑它 *t'o* 'lying boasts' (also called *yi* 'boast'), 侈多 *chï* 'profligate,' 詍 read *yi* 'self-sufficient.' Read *she* 'loquacious,' 詍 *yi*, 泄 *shï* 'much talk.'

The group of phonetics which by such comparisons of meaning may be seen to be closely allied, embraces 也 *ye*, with its compound forms 施 *shï* 'give,' and 𠂤 *yi* 'extend,' 世 *shï* 'age,' 'generation,' '30 years,' 多 *to* 'many,' 曳 *yi* 'extend,' 它 *t'o* 'bear,' 'carry.' Of these, three begin now with a vowel. In the words written with these three there are however examples where *s* and *ch* remain, indicating that an initial *d* is lost.

The old substantive verb 爲 *wei* 'to be,' 'to do,' has lost an initial *g*, as we learn from the word *wei* 'false,' 僞 *wei*, old sound *ngwei*, written with it. But this is not the only proof; we have also 捣 *hwei* 'to rend,' 'to split,' 'to point out with the hand.'

In such cases the phonetic teaches us the old history of words. If we wish to compare the Chinese substantive verbs with the Mongol for instance, it is important to discover by the phonetic what was the original state of the word. In this case, the oldest form of this verb at which we can arrive is *ga*. The rhymes of the (Shï king) Book of Odes require us to read the vowel as *ā*, while the phonetic requires us to restore a lost *g*.

While showing the loss of *d* and *g*, or *t* and *k*, from many words beginning at present with *y* and *w*, the fact of a lost final *p* has come into view. The loss of final *p*, accompanied by that of *k* and *t*, is one of the most interesting discoveries which we owe to the ancient phonetic writing. It is shown in this way. The word *hwa* for 'flowery' 華 bears no trace in the present state of dialects of a final *p*. But as a phonetic the character occurs with *p* in 燁 *yep* 'glorious,' 曄 'clear,' 'white.' *P* then belongs to the phonetic originally. The Chwen form is 𤇾. The connexion in meaning between this word and

花 *hwa* 'flower,' requires us to hypothecate a final *p* also to that word, which is probably only the old form with surd initial of the original sound *gap*, with sonant initial. But *hwa* 'flower' 花 is formed with 化 *hwa* 'to change,' 'renovate.' *Hwa* 'flower,' then, is so named from the metamorphosis daily witnessed in plants when they burst into flower. The Mongol *hebilhu* is the equivalent in that language, and means 'to change,' 'metamorphose.' The word 貨 *hwo* 'goods,' 'commodities,' means that which is exchanged. It is *kap*.

The time when *p* final was lost in these words was before the date of the composition of the Odes, and after the invention of the characters. This we know from the Lu shu yin yün piau of Twan yü tsai, which places this phonetic in the first tone, where final *p* is impossible.

This statement that *p* was lost in such words soon after the invention of writing may be confirmed by facts respecting the loss of *k*. In the phonetic 高 *kau* 'high,' we have a word which in the Book of Odes is made to rhyme with final *k*, and was called *kok*. The loss of *k* in this phonetic was therefore somewhat later than that of *p* in *hwa* 'flowery.' In no poetry later than the time of Confucius is *kau* 'high' made to rhyme with words in final *k*.

The rhymes of the Book of Odes enable us to fix the syllabary for the age B.C. 1100 to 700 in the way here illustrated.

Changes in letters before the invention of writing form a very interesting feature in this investigation. Among them I shall include the transition of the finals *k*, *t*, *p*, to *ng*, *n*, *m*, and the change of final *m* to final *ng*, with the occasional change of final *p* to *k* and *t*.

The change of final *t* to *n* is not a recent phenomenon. In modern times *t* is only dropped. That it formerly changed to *n* can be made plain, at least highly probable. Thus 分 *fen* or *pun*, *ven* or *bun*, 'divide,' is cognate to 別 *pit* or *bit* 'different,' 'separate.' So 頒 *fan* or *pan* 'extend,' 'spread out,' is cognate with 頖 *pan* 'spread abroad,' 'divide out,' and with 發 *fa* or *pat* 'send forth.' 斤 *kin* 'hatchet,' and 割 *kat* to 'cut,' are cognate. 散 *san* to 'scatter,' and 撒 *sat* 'sow seed,' are written with the same phonetic, showing that the inventors of writing were conscious of the connexion.

The change of final *k* to *ng* occurs in 擴 *kwok* to 'widen,' formed phonetically from 廣 *kwang* 'wide.' The other phonetic used for this word is 郭 *kwok*, which always means 'wide,' whether used for a 'coffin

case,' the 'desert land outside of cities,' to 'expand,' or for the broader part of the leg below the knee. But this phonetic is compound and is formed from 享 *hiang* 'to enjoy,' which is reducible to *kong*. The Chwen form 𠭯 is a picture probably of an ancient vessel, and contains an allusion to sacrifices. In both phonetics the order of invention of the written signs is the opposite of the order of etymological derivation. The etymological derivation had already taken place. Indications such as we have here show how we can discover the outline of the history of Chinese words before the invention of writing. A people sufficiently civilized to make written signs of words must have a language suitable for their use, with an extensive variety of words abstract and concrete; and the steps in derivation by which these words are formed will often be recoverable. Another example of *ng* from *k* is in the phonetic 易 *yik* to 'change,' found in 錫 *sik* 'tin,' 場 *yik* a 'dike' or 'boundary,' 楊 *yik* 'flame'; and with one horizontal stroke more, in 陽 *yang* 'light,' 楊 *yang* 'flame,' to 'fuse metals.' The last example agrees in sense with 楊 *yik* 'flame.' If these words were one originally, the name for 'tin' and the verb to 'melt' may be derived from the idea of transformation, tin being easily melted, and the root of all these words will be *dik* or *tik* to 'change,' to 'melt.'

An example of *p* changing to *m* is found in 占 *tiem* or *tiep*, *tem* or *tep*, a 'hostelry,' a 'point,' to 'divine,' to 'try the weight of anything,' 'sweet.' With *p* final it means a 'saucer,' 'plate,' 'card,' single sheet of anything, etc. *Tem* is 'sweet,' 'happily resigned,' *tep* is 'quiet and resigned,' 沾 'self-gratified' is read *tep*, *tem*, *cham*. This is a very convincing instance of the change from final *p* to final *m*. If others are doubtful, this can scarcely admit of doubt. We have 帖, 怗, called *tep*, and 沾, 霑, 佔, called *cham*. The change from *p* to *m* in the last three of these characters would take place after the invention of writing.

The conclusions at which we arrive are that (1) *k*, *t*, and *p* began to change to *ng*, *n*, and *m* before the invention of writing; (2) that at the time of the invention of writing this process of change was going on, and was especially prominent in the labial region; (3) that not very long after the invention of writing this process ceased and another commenced, viz. the dropping of *k*, *t*, and *p*, a process which has continued ever since, and is still observable.

That we are now able to notice these facts is because of the phonetic nature of Chinese writing. The original ideographs were quickly made the depositories of that kind of linguistic phenomena for which they were adapted. The genius of the people being practical, they at once commenced, long before the invention of the alphabet in Western Asia, to shorten the labour of the scribe, by making almost every ideograph a phonetic sign used to write words whose sound was the same or nearly the same. Each character thus invented is a sort of photograph, which, through 4000 years, has been preserved from fading, because the love of learning in that country has transmitted the original sound from tutor to pupil in each generation down to the present time, only modified by those changes in letters over which neither tutor nor pupil ever had any control.

One most striking and important change is that of final *m* to *ng*. This must have taken place chiefly before the invention of writing, for it does not appear in the phonetics to any large extent. Perhaps we have it in the sign 壬 *nim* a 'load,' to 'carry,' which also is called *t'ing*. The letters *t* and *n* used as initials are cognate, as may be shown. The *t'* here is in fact *d*, the old initial of 廷 *t'ing* 'palace,' 'court,' 'hall.' In the Chwen character *jen* and *t'ing* are still distinguishable in form (𡈼 *jen*, 庭, 廴 *t'ing*) in Morrison's examples, so that the proof of *ng* coming from *m* in this phonetic is not complete, but nearly so. When we are guided by natural laws, we are secure. The caprice of early scribes may mislead us. We have the derived meanings to guide us, and the changes of letters. These rightly understood will prevent our being misled.

Among the derivatives of this root we find 呈 *ching*, old form *ding*, 'present a petition,' *i.e.* take or send it up. The honorific notion of 'upwards' is inherent in the word. Here our root is the phonetic. *Sheng* 聖 'holy,' from an older sound *ting*, as we are told by the phonetic, rhymed with the other words when writing was invented. So also 程 *o'heng* 'road,' 'travel,' 'a measure,' etc., 裎 *o'heng* 'naked,' 醒 *cheng* 'wake up' (= *sing* 醒 'to wake').

The phonetic 坑 *k'eng* 'a pit,' 'to sink any one into a pit,' agrees in sense with *kiem* 'a pit,' 坎 'to fall into a pit,' and with 陷 *hiem*, 陷 *hiem* or *gam*, 'fall into a pit.' The word 錎 *hiem* 'ring of a wheel,' 'a ring,' 'sink down,' may be compared with 陷 *hiem*, *gam*, 'to

swallow,' 'gormandize,' and with 涵 *ham* or *gam* 'contain,' and with 含 *han* or *gam* 'hold in the mouth,' and with 銜 *ham*, *gam*, 'contain in the mouth.' Let these words be compared with 亢 *hang* or *kang* 'the neck' or 'throat,' 吭 *hang* to 'swallow,' 'neck of a bird,' 欣 *hang* 'covetous,' and 歁 *hiem* or *gam* the 'crop of a bird.' The neck then is called *hang* and *king*, because it is used in swallowing. Words that mean 'covetous,' 'greedy,' 'contain in the mouth,' and some names of tastes, are in many cases sprung from this root.

Compare the following pairs of words: *sim* 'the mind,' *siang* to 'think,' *lim* to 'drip,' 'rain falling,' *ling* 'efficacious' 靈 (the radical here is *yü* 'rain,' as if the sort of efficacy chiefly referred to were that of rain falling). Another is *sheng* or *dim* 'string,' and 綝 *lam* 'a cable.' Another, 兼 *kiem* 'connected,' 'joined,' and 并 *kung* 'with.' Another 店 *tiem* 'a shop,' 'inn,' 堂 *t'ang* or *dom* a 'house' or 'hall.' *Sam* 'three' 三, and 鐺 *tang* a tripod for hot wine, 鼎 *ting* a tripod of bronze, of which nine are placed in the court of imperial audience. Another, 蠶 *dzam* 'silk-worm,' 虫 *c'hung* or *dung* 'insect,' 'worm,' 'reptile.' Another, 剗 *t'san*, *t'am*, 'chop,' 'cut,' 傷 *shang* to 'wound.' Another, *lim* 'granary,' 倉 *ts'ang* 'granary.' *Lam* 藍 'blue,' 蒼 *tsang* 'blue.' *Tiem* 忝 to 'add' (here the phonetic[1] is *sim* 心, old sound *tim*), 增 *tseng* to 'add.' *Ts'am* 句 'blend with,' 'mix with,' 相 *siang* 'together.' *Tsiem* 潛 'to ford water,' *t'ang* 'to ford water' (both words refer to the act of trying the depth of water, 探 *t'am* to 'try,' 'feel,' 'explore'). *Tam* 揨 'carry,' and 當 *tang* 'bear.' *T'am* 'extend,' 'wide,' 蕩 *tang* 'wide.'

It is possible that, by pursuing research in this field, the final *ng* may be entirely eliminated from the vocabulary; the greater part of the examples being reducible to *m*, and a smaller portion to *k*. When final *ng* is thus eliminated, the Chinese syllabary becomes the same as the Semitic, and words may be compared.

I now come to a very important law, the parallelism of *s* and *sh* with *l*. Note that *s* and *sh* are cognate in Chinese.

爽 *shwang* 'fresh,' 'cheerful'		涼 *liang* 'cool,' 'fresh.'
霜	,, 'frost'	冷 *leng* 'cold.'
雙	,, 'a pair'	兩 *liang* 'two.'

[1] The character 天 *t'ien* is here phonetic only in regard to the initial *t'i*.

首 *sheu(t)*	'head'	顱 *lu(t)*	'head,' 'skull.'
壽 ,,	'old age'	老 *lau(t)*	'old.'
山 *shan*	'mountain'	巒 *lan*	'mountain,' 'summit of mountain.'
旋 *siuen*	'revolve'	輪 *lun*	'wheel,' 'revolve.'
廂 *siang*	'side apartments'	廊 *lang*	'side apartments.'
數 *sut*	'proportional'	呂 *lü(t)*, 律 *lut*,	'notes of music.'
嵩 *sung*	'high'	隆 *lung*	'high.'

The cause of this parallelism, so striking in these and many other examples, is common derivation from the letter *d*. That initial has always been giving off colonies. In one set of words it has changed to *t*, in another to *sh*, in another to *s*, in another to *ts*, in another to *ch*. It would be possible to draw up lists of words having equivalent meanings under the leadership of any two of these letters. I have chosen *s* and *sh* on one side, and *l* on the other, because the contrast is most striking. *L* and *s* do not interchange. The reason of the resemblance in meaning found in a long list of words of which they are the initials can only be that both come by natural change from *d*.

The phonetics differ in all cases. We may therefore conclude that the double process of letter change just described, one of sibilization, and one of lingualization, took place before the invention of writing, that is, in the third millennium before the Christian era.

The question then arises, were the Chinese separated from the rest of mankind while these changes were slowly taking place, previous to the invention of writing? Did the Chinese bring the art of writing with them into their country? Had it a common origin with the Cuneiform writing of Babylon? It would be very interesting to know whether the art of writing had but one origin for the Chinese and the Babylonians.

The Cuneiform monuments have already revealed the Accadian, a lost Turanian language, of which nothing is known but by means of these monuments. Since it is more nearly allied to the Finnish than to the Mongolian or Dravidian sub-families, it is necessary to place any epoch of connexion between Accadian and Chinese at a much earlier date than the time when these bricks were in the hands of the Babylonian scribes.

SECTION 5.—*The Whole Body of the Characters is an Index to the Nature and Extent of the Vocabulary, and to the Advance then Made in Civilization.*

Among the words written with the phonetics we find a full supply of abstract terms, including all words descriptive of moral ideas. Political terms, ranks of nobility, and words suitable for the expression of feudal ideas, are all found. Thus 夢 *meng*, and 誓 *tet* 'oath,' were used for the oaths sworn in ancient China when the feudal barons made treaties with each other. Terms connected with divination and the old Chinese sacrifices are, as might be expected, very complete and numerous. A remarkable abundance occurs in the names of sacrifices, indicating the large place held by religion in men's thoughts. Geometrical and arithmetical conceptions are so fully expressed that when Euclid's Elements were translated three centuries ago, it was not necessary to introduce a single foreign word. The number of simple conceptions expressed by monosyllables in this language is extraordinary and unique. Not that the Chinese do not make compounds. They do so to a large extent. But while they multiply their compound phrases, they still keep the simple expressions, and these are all as old as the characters.

The language was such, when the characters were made, that the scribe, the agriculturist, the carpenter, the bricklayer, the fisherman, the boatman, the trader, the legislator, the schoolmaster, all had their special vocabularies. Words adapted to the several occupations of men and to their social relations were in common understood use.

The word *nin* was equally applied to man or woman, but sex was distinguished by the words *nam* and *nu* or *nok*, *nok* meaning the weak one. The gender of animals was marked by *mut* for the male and *p'im* for the female. The Chinese never apply *p'im* to woman, as we do the Latin *femina*, which so curiously resembles it. The reason of this is in the fact that there was an old-established order in the use of words which they had learned to respect, and which no one would venture or wish to contravene.

Words for weights and measures were very full. Among them are the inch, the foot, the measure of ten feet, the tenth of an inch, a land measure of about the sixth of an acre, a pound weight, an ounce, which was one-sixteenth of a pound, a short mile of 1250 feet.

Almost all of these measures and weights had ideographs invented to express them.

The same is true of several of the beasts of burden and other common domestic animals. Some have ideographs, others not. The fowl, the goose, the duck, the donkey, and the mule, are spelled phonetically. The horse, sheep, cow, swine, have pictures drawn of them, 馬, 羊, 牛, 豕.

The metals are written phonetically, except gold, which is 金 *kim*, and this is also used as a common name for all metals. There seems no reason to doubt that silver, copper, iron, and tin were known at the time of the invention of writing. Iron is mentioned in books as early as any other of the metals. Coined money was a later invention. The precious metals were weighed out by the pound and the ounce, the pound being a hatchet-shaped weight, and called from that circumstance *kin*.

The extent of the vocabulary may be judged of from the number of words which, at the option of the speaker, may be used for any one idea. Thus 揀 *kien* or 柬 *kien*, 選 *siuen*, 練 *lien*, 擇 *tse* or *dak*, 挑 *t'iau*, are all used in the sense to 'choose.' By applying the preceding laws of letter-change, these five verbs are reduced to three. *Siuen=lien*. *Tse* or *dak=tiau*.

Those who wish, in Darwin's way, to account for the origin of moral ideas, will get little aid from the Chinese names, which have now attained, since they were written down, the venerable age of four millenniums. Such terms, so far as they can be examined, come in almost each case instinctively out of man's moral nature. 仁 'benevolence,' comes from *jen* 'man,' just as *humanitas* does from *homo*. The sound of the word is the same, and the character is formed from that for 'man.' 孝 *hiau* 'filial piety,' is etymologically connected with the word *kiau* to 'instruct,' both in meaning and in the form of the character. 敎 *kiau* 'to instruct,' again, is connected with the idea of 效 'imitation' *hiau*, of 學 'learning' *hok*, and of 'making strokes' *hwak*. These are all probably one word originally. The idea of loyalty is based on the centre of human nature. It is called 忠 *chung*, and so also is the human mind and heart, which is represented in the oldest Chinese moral system as sent down from heaven and implanted in man as a gift from above. The words for 'right' and 'wrong' are identical with the simplest words for affirmation and

negation, *shï* 是, and *fei* 非. To the primitive Chinese mind the substantive verb expresses what is right, and its contradictory that which is wrong. This is only consistent with the instinctive theory of the origin of moral ideas. Another point to be here noticed is that the Chinese words for 'right' and 'wrong' have also the meaning 'this' and 'that.' The oldest sounds traceable for the common demonstratives are *dik* and *pit*. The Chinese words for 'reason' 理 *le(t)*, 禮 'ceremonies' *le(t)*, 'moderation in conduct' 節 *tset*, are connected with the root 第 *dit* or *di* 'order,' 列 *liet* 'arrange in order,' 'arrangement.'

The word for 'rectitude,' 義 *i* or *ge* or *get*, is probably identical with the other common demonstrative 其 *k'i* or *gi* or *get*, and derives its origin from it.

'Conscience,' and 'the consciousness that what I do is right,' is also expressed in Chinese by a compound phrase, which means 'good heart' *liang sin*.

The words for 'good' and 'bad' are connected with the words for 'loving' and 'hating.' 好 *hau* 'good' (on the Stone Drums 汝), and 善 *shan* 'virtuous,' both take a verb force 'to like,' or 'to regard as good.' So with 惡 *ak* 'bad.' As a verb it means 'to hate.' Liking and disliking were the originals from which the adjectives were formed. Here we are left in uncertainty. Goodness may come from liking, or liking from goodness.

The strength and definite outspokenness of the moral consciousness in the Chinese mind thus reveals itself in the earliest form of the language, which we can now examine, as it does throughout the most ancient literature, and the writings of the most famed national teachers.

SUR LA RECONSTITUTION

DE LA

LANGUE CHINOISE ARCHAÏQUE.

PAR LE PROFESSEUR LÉON DE ROSNY.

(*Résumé de la Communication.*)

JE demande au Congrès la permission de lui soumettre quelques uns des résultats philologiques des études que j'ai été appelé à entreprendre pour composer la partie de mon *Histoire de la Race Jaune* relative aux langues de la Chine et de l'Asie orientale.

J'ai essayé d'établir l'année dernière, à l'une des séances de la première Session de ce Congrès, que le *monosyllabisme*, qui est d'ordinaire, non point le caractère d'un groupe linguistique, mais celui d'une période particulière, d'un âge de la vie des langues, jouait un rôle tellement essentiel en chinois, que, malgré l'insuffisance de cette dénomination, il n'était guère possible d'en choisir une meilleure pour les langues parlées dans le Céleste-Empire et pour les idiomes de l'Indo-Transgangétique qu'on a considérés jusqu'à présent comme étant de la même famille.

Seulement il est nécessaire pour se former une idée exacte de ce qu'était anciennement le monosyllabisme chinois, de reconstituer la prononciation archaïque des signes, très-altérée dans le *kouan-hoa* ou langue vulgaire généralement répandue dans l'empire. J'ai essayé de

reconstituer cette prononciation archaïque, à l'aide des mots dont la notation phonétique avait été conservée par les peuples qui ont entretenu dans les anciens temps des relations avec la Chine, et en outre au moyen de lois de permutations fondées sur l'étude comparée de la langue mandarine et des dialectes provinciaux de Canton et du Fouhkien. La connaissance du Japonais m'a apporté, pour ce travail, le plus inappréciable secours. Les insulaires du Nippon ont, en effet, emprunté un nombre considérable de mots aux Chinois, à une époque où la langue de ces derniers n'avait point encore subi les altérations qu'on y constate surtout depuis la dynastie des *Tang*. Lorsque les Japonais commencèrent à étudier la littérature chinoise, on faisait encore usage, dans la patrie de Confucius, de la vieille prononciation à laquelle ils ont donné le nom de 漢音 *Kan-won*, 'sons de la dynastie des *Han*.' Outre d'autres particularités qu'il serait trop long de signaler ici, cette vieille prononciation distinguait d'une façon toute spéciale les mots affectés du ton musical 入聲 *jŭh-ching* ou 'ton bref' des missionnaires. Ces mots formaient des monosyllabes bilitères, c'est à dire, composés d'une voyelle simple ou d'une diphthongue entre deux consonnes. Avec de tels thèmes bilitères, on obtenait des mots absolument analogues aux racines primitives des idiomes sémitiques et âryens. De nos jours encore, ces thèmes se rencontrent dans les mêmes conditions, en cantonais, en fohkiènois, en annamite, en coréen, etc. L'examen des mots empruntés au bouddhisme, et dont les éléments sanscrits avaient dû être notés avec toutes les ressources qu'offrait pour ce travail de transcription l'écriture idéographique si peu favorable à la représentation des sons étrangers, devait également confirmer d'une façon éclatante ces premiers résultats. Un seul exemple suffira pour expliquer ma pensée en ce moment : étant donné le mot sanscrit लक्ष *lakcha* 'cent mille,' les Chinois choisirent pour le noter phonétiquement à l'aide de leur écriture idéographique les deux signes 洛 叉 qui se lisent aujourd'hui *lŏh-tchaï*. Au premier abord, on se demande pourquoi ils adoptèrent le son *lŏh* pour rendre la lettre dévânagarî ल *la*, alors qu'ils possédaient dans leur langue des signes qui se lisent *la*; on pourrait se demander également pourquoi, possédant le son *cha*, ils ont rendu la lettre dévânagarî च *kcha* par *tchaï*. Eh bien! ils ont procédé aussi rationellement qu'ils pouvaient le faire. S'ils eussent pris des signes se prononcant *la* et *cha*, ils auraient formé le mot

lacha et non *lakcha*. Au contraire, ils ont pris le caractère 洛 parceque ce caractère, étant affecté du ton bref ou rentrant, se trouvait représenté dans le langage oral par un monosyllabe bilitère composé d'une voyelle entre deux consonnes, comme la syllabe indienne *lak*, et parceque 洛 se prononçait *lak*, ainsi que nous l'indique notamment l'orthographe Japonaise *kan-won* (ラク *rakŭ*); quand au second signe 叉 nous trouvons, dans les dictionnaires qui nous fournissent cette dernière orthographe, qu'il se lisait anciennement *cha* (シヤ 又). La transcription chinoise 洛 叉 reproduit donc aussi exactement que possible le mot sanscrit *lakcha*.

La désinence consonnaire des monosyllabes chinois affectés du ton *jŭh* ne souffre point d'exception; et tous les peuples qui ont eu jadis des relations avec la Chine en ont conservé des témoignages. Dans une légende traduire du siamois et insérée dans le premier volume des travaux de notre première Session, nous trouvons notamment le nom du pays natal de Confucius transcrit *Roukok* (chinois 魯 國 *Loukouĕh*).

J'ai dit que les Japonais nous ont conservé, sous le nom de *Kan-won*, 'sons des *Han*,' la prononciation qu'avaient les caractères chinois au commencement de notre ère, et même à une époque plus ancienne. Leurs dictionnaires, aussi complets que les meilleurs dictionnaires chinois, sont, à cet égard, d'une immense utilité pour la philologie comparée. Je n'ai pas cru cependant devoir considérer comme acquise la prononciation archaïque d'un monosyllabe chinois, alors que je n'avais recueilli sa prononciation *Kan-won* que notée en écriture syllabique du Nippon (ordinairement en *kata-kana*). J'ai pensé qu'il fallait corroborer l'exactitude de cette notation à l'aide de rapprochements empruntés à d'autres sources. J'étais, par exemple, incertain si le son des caractères prononcé aujourd'hui *tsze* (子, 自, etc.) était bien *si* (シ) comme l'indiquent les lexicographes japonais; ou *tsi* comme certains rapprochements philologiques me portaient à le supposer. J'ai dû reconnaître l'exactitude de la notation archaïque *si*, en la retrouvant dans la transcription de mots chinois faite par des peuples qui n'avaient certainement eu aucune connaissance de l'orthographe des Japonais. Le nom de la tribu des *Mantsze* (蠻 子) notamment, se prononçait encore *Manzi* à l'époque de Marco-Polo, et c'est de la même façon (منزی) que les voyageurs arabes nous en ont mentionné l'existence.

J'ai poursuivi, d'après la même méthode, la recherche des prononciations archaïques de chacune des phonétiques chinoises, mais je dois avouer que, dans plus d'un cas, je suis resté dans l'incertitude sur la valeur des résultats obtenus. Un éminent Sinologue anglais, dont je n'ai pu malheureusement me procurer tous les travaux, le Rev. J. Edkins, a entrepris sur l'ancienne langue chinoise un travail analogue au mien. Faute sans doute de connaître quelques uns de ses savants écrits, j'ai été plus d'une fois à me demander les raisons qui l'avaient porté à admettre certaines prononciations comme véritablement archaïques. Je crois que le son antique de chaque phonétique chinoise en particulier, ne doit être admis qu'après avoir été établi d'une façon définitive, en faisant usage de toutes les ressources de la philologie moderne ; et, lorsqu'il s'agit de signaler des affinités de l'ancien chinois avec d'autres langues asiatiques, comme l'a fait M. Edkins, il me parait nécessaire de justifier tout d'abord de la forme qu'on attribue à chacun des mots restitués de la langue antique avec lesquels on veut opérer des comparaisons.

Jusqu'à présent les comparaisons qu'on a tentés du chinois avec d'autres langues de l'Asie orientale, méridionale et centrale, il faut l'avouer, n'ont amené qu'à d'assez maigres résultats. Il ne sera donc pas inutile de déterminer ici dans quelles conditions doivent être faites ces comparaisons pour avoir un caractère vraiment scientifique.

Il s'agit tout d'abord d'établir la forme archaïque des monosyllabes chinois : ce travail n'a pas été accompli, autant que je sache, mais des résultats considérables sont déjà obtenus.

Le problème qui se présente aussitôt après, et qui n'est pas à beaucoup près le plus simple à résoudre, est celui qui repose sur le système d'accentuation tonique et musicale des mots chinois. J'ai dit qu'en ce qui concernait le ton *jŭh* ou rentrant, nous étions déjà arrivé aux résultats désirables. Il n'en est pas ainsi des autres tons, notamment du ton 平 *ping* ou égal, qui nous fournit une foule de monosyllabes ayant dans le *Kouan-hoa*, pour désinence un son nasal habituellement transcrit par *ng*. La prononciation des *Han* (*Kan-won*), que nous ont conservé les dictionnaire japonais, supprime cette nasale et la remplace par un *u* long qui se combine avec la voyelle *a*, *o*, *e*, ou *i*, des monosyllabes affectés du ton *ping*. L'absence de la nasale parait cependant peu probable dans la langue antique, bien qu'elle dût être moins sentie qu'elle ne l'est aujourd'hui.

Une autre question, qui se pose immédiatement à coté de celle-ci, se rattache aux changements, non seulement de ton, mais encore de vocables, dont un mot chinois est susceptible, lorsqu'il acquiert une nouvelle nuance de signification, lorsqu'il prend une acception qui, au point de vue de nos langues, le fait passer d'une catégorie grammaticale dans une autre.

J'ajouterai, pour appeler l'attention des sinologues et des linguistes sur une face importante du problème qui me parait être encore fort obscure, qu'un même mot change parfois de ton en passant d'un dialecte dans un autre. Il y a là une loi que je soupçonne, mais que je suis encore loin d'avoir découvert d'une manière satisfaisante. On dit que bien poser un problème, c'est contribuer à le résoudre. Je serais charmé que les spécialistes puissent reconnaître dans les *desiderata* que je signale rapidement au Congrès, quelques traits de l'esquisse du problème relatif à la condition archaïque, si non absolument primitive de la langue chinoise.

Il est un autre sujet sur lequel je désire appeler tout particulièrement l'attention des sinologues et des linguistes qui me font l'honneur de m'écouter. Je veux parler de l'influence de l'écriture idéographique sur l'ancienne langue parlée du Céleste-Empire.

S'il est vrai de dire que toutes les langues écrites ont subi des altérations en rapport avec la nature des caractères employés pour leur notation, il faut certainement le dire d'une façon toute exceptionnelle pour les langues auxquelles a été adaptée, plus ou moins complètement, l'écriture dite figurative ou idéographique de la *Race Jaune*. C'est à cette écriture d'ailleurs que les mots chinois doivent leur forme en quelque sorte immutable, stéréotypique, et l'absence de toute agglutination entrainant une modification quelconque dans leurs éléments phonétiques constitutifs. Mais cette influence a été bien autrement considérable, en ce sens qu'elle a empêché la création en chinois d'aucun système de filiation, de dérivation entre les différents mots du langage, de sorte qu'on peut dire de cette langue qu'elle possède autant de racines que de mots, et que tous ses mots sont des racines.

Reste cependant à savoir ce qu'il faut entendre, philologiquement parlant, par *un mot chinois*. Je crois que faute d'avoir suffisamment élucidé cette question, on a rendu, si non impossible, du moins fort difficile pour le moment, toute comparaison sérieuse du chinois avec les autres langues.

Un mot chinois résulte-t-il de la prononciation affectée à chaque signe de l'écriture idéographique? En d'autres termes,—et pour rendre ma pensée plus aisément intelligible,—faut-il voir, dans le dictionnaire de l'empereur Khang-hi notamment, 42,000 mots chinois dans les 42,000 signes environ qu'il renferme., Je ne le crois pas à beaucoup près, et je vais essayer de le prouver.

Si l'on examine la signification donnée par les lexicographes de la Chine aux signes de leur écriture, on trouve qu'une foule d'entre eux représentent des idées essentiellement secondaires ou dérivées, et qui ne sauraient être, chez aucun peuple, de ces idées primitives à l'aide des quelles se produisent les racines du langage. Pour ne citer que peu d'exemples, est-il possible de considérer comme des radicaux des mots qui ont des significations analogues à ceux-ci:

meï, 'choses devenues noires par l'effet d'une pluie continuelle' (Res à pluvia continua denigratæ, Basile).

li, une liqueur qui se fabrique en la distillant pendant une nuit (A liquor made by being distilled one night, Morrison).

yen, un animal ressemblant au genre rat, mais qui est grand comme un bœuf et aime à se coucher dans les rivières et à boire de l'eau (An animal resembling the mouse kind, but as large as an ox, loving to lie down in rivers and drink the water, Medhurst).

Tous les mots techniques, les noms d'animaux, de plantes, de minéraux, d'objets et d'ustensiles de toutes sortes, sont de la même façon représentés par des signes spéciaux dans l'écriture idéographique; mais il n'est guère possible de voir des mots primitifs, des racines dans les monosyllabes suivant lesquels ces signes sont prononcés à la lecture.

L'examen général du vocabulaire chinois m'a amené à conclure à l'existence d'un petit nombre de racines primordiales, des quelles découlait, dans l'écriture, une quantité considérable de dérivés homophones et idéologiques. De la sorte, chaque monosyllabe de la langue chinoise orale représente une ou plusieurs idées premières (le plus souvent moins de cinq), susceptibles, comme toutes les racines des langues connues, de produire une série plus ou moins considérable de modifications ou plutôt de nuances de sens. Pour expliquer ma pensée à cet égard, je prendrai pour exemple la racine monosyllabique TCHI, laquelle exprime 'un mouvement en avant, une tendance vers un but.' Avec ce monosyllabe radical, on a formé:

TCHI=atteindre à.

至 *tchi*, *a*, aller à, atteindre; *b*, le suprême dégré; *c*, grand, bon (parfait).

之 *tchi*, aller à.

底 *tchi*, aller à un point donné.

俤 *tchi*, promener.

致 *tchi*, *a*, se rendre à, faire une visite; *b*, être à la tête de, gouverner.

倳 *tchi*, choses qui arrivent au même point, qui se réunissent, qui arrivent à être en contact.

揨 *tchi*, atteindre un objet avec la main; désigner du doigt, etc.

摯 *tchi*, saisir avec la main, atteindre; pousser à l'extrême.

騭 *tchi*, saisir par violence.

擲 *tchi*, saisir.

持 *tchi*, prendre, saisir.

指 *tchi*, montrer du doigt, indiquer un objet éloigné.

遲 *tchi*, marcher lentement.

夂 *tchi*, marcher (lentement), flâner.

趍 *tchi*, marcher (rapidement), courir.

趾 *tchi*, courir, fuir.

志 *tchi*, tendance, inclination, but.

誌 *tchi*, tendance vers le passé, souvenir, histoire, se rappeler.

旨 *tchi*, intention, volonté.

祉 *tchi*, le but de la vie atteint, bonheur, félicité.

禔 *tchi*, repos, bonheur.

詆 *tchi*, parole qui atteint, qui touche, accuser.

疧 *tchi* blesser, porter un coup.

笞 *tchi*, châtier, corriger.

搋 *tchi*, châtier, corriger.

遞 *tchi*, châtier, corriger.

TCHI=suprême.

至 *tchi*, le plus haut dégré, suprême.

攴 *tchi*, beaucoup.

侈 *tchi*, grand, étendu, prodiguer.

庢 *tchi*, grand, large, étendre, augmenter.

廗 *tchi*, grand, large, étendu, augmenter.

肢 *tchi*, beaucoup de viande (月).

TCHI = obstacle.

恉 *tchi*, désirer atteindre le but, mais éprouver des embarras pour cela (Morrison).

滞 *tchi*, embarras dans la circulation d'un cours d'eau ; congélation, concrétion.

懥 *tchi*, embarras ou empêchement moral (心), désaccord, brouille.

傺 *tchi*, embarrassé, arrêté.

疐 *tchi*, qui arrive mal au but, fou, esprit dérangé, malade (疒).

止 *tchi*, arrêt, s'arrêter ; seulement.

只 *tchi*, seulement.

啻 *tchi*, seulement.

峙 *tchi*, faire halte.

跱 *tchi*, halte, faire halte.

坻 *tchi*, s'arrêter.

踟 *tchi*, embarras, hésitation.

厎 *tchi*, qui n'avance pas, qui fait de vains efforts pour avancer.

TCHI = séparé.

支 *tchi*, *a*, séparer, diverger ; — *b*, branche (de bambou).

侍 *tchi*, eaux qui coulent dans différentes directions (diverging waters).

汥 *tchi*, id. (diverging streams).

誃 *tchi*, séparé ; disperser, répandre.

謘 *tchi*, id.

Il résulte des exemples qui précédent, exemples que l'examen d'un Dictionnaire chinois tonique fournirait d'un bout à l'autre, que les signes de l'écriture idéographique, loin de représenter, tous, des mots ou des racines chinoises, ne sont souvent que la notation graphique d'une nuance particulière attachée dans certaines circonstances à un mot chinois. En d'autres termes, on peut établir que l'écriture idéographique a été l'objet de développements considérables, alors que le matériel des mots de la langue orale restait peu considérable, et même se réduisait à cinq ou six cents monosyllabes différents, si l'on ne tient pas compte de l'accentuation tonique et musicale qui, même avec ses modifications les plus délicates et les moins sensibles, ne fournit tout au plus qu'un matériel de trois à quatre mille mots phonétiquement distincts.

Il devient ici nécessaire d'étudier la question des origines de l'écriture chinoise, et de discuter dans quelle mesure les données des indigènes à ce sujet peuvent être acceptées par la science philologique. Les Sinologues se sont surtout occupés jusqu'à présent de traduire des textes: ils se sont peu préoccupés de les critiquer. Nul ne saurait leur faire un reproche d'avoir procédé de la sorte; il est tout naturel de collectionner d'abord les faits dans leur ensemble, sauf à les soumettre en suite à une discussion analytique de détail. Plusieurs savants ont donc demandé aux Chinois ce qu'ils pensaient de l'origine et des développements successifs de leurs caractères, et ils ont placé au point de départ, les légendes de *Fuh-hi*, cherchant sur la voûte céleste les éléments de l'écriture, et de *Tsang-hieh*, imaginant ces éléments à l'instar des traces laissées par les animaux en courant sur le sable. Avec de tels contes, on arrive à nous exposer le système adopté aux temps préhistoriques pour conserver par des images le souvenir des objets matériels qui frappaient la vue de l'homme; puis, on nous rapporte, que pour exprimer les idées abstraites on avait eu recours soit à des signes à formes opposées, soit à des caractères dans lesquels plusieurs images réunies servaient à indiquer une idée dérivée. Enfin on nous montre l'écriture arrivée sous le nom de *tchouen-chou* à une perfection qu'elle n'a guère dépassé depuis lors. Il s'agit ici d'une époque contemporaire ou antérieure à Confucius. Je laisse pour l'instant de coté la question de date précise.

Si maintenant, partant des données des auteurs chinois, données que

je viens de rapporter ici de la façon la plus succincte, nous cherchons les monuments qui permettent d'établir l'exactitude de leurs doctrines au sujet des âges primitifs de l'écriture dite *idéographique*, nous nous trouvons dès l'abord en présence de difficultés et de contradictions inattendues. Pour ne pas abuser de vos précieux instants, je me bornerai à citer quelques unes de mes observations à cet égard.

L'écriture attribuée à Fouh-hi et à laquelle on a donné le nom de *Koua*, appartient à un système qui n'a rien à faire avec celui de l'écriture chinoise proprement dite. Il faut donc demander ailleurs des spécimens des époques primitives de cette écriture. D'après les indications des auteurs indigènes, les caractères figuratifs formés à l'aide d'images plus ou moins exactes des objets que l'on voulait indiquer, et donc les orientalistes ont publié de nombreux spécimens, seraient les signes caractéristiques de la plus ancienne écriture chinoise. Mais où trouver des textes écrits avec ces images? Les recueils d'inscriptions antiques publiés avec tant de zèle et d'exactitude par les archéologues du Céleste-Empire, du moins ceux que j'ai pu examiner minutieusement,—et ils sont en assez grand nombre, —n'en renferment point un seul. Je dirai plus; c'est à peine si, de loin en loin, dans les inscriptions authentiques des âges les plus reculés, on peut découvrir un signe qui puisse rentrer dans la catégorie des signes images attribués à l'antiquité chinoise. Toutes ces vieilles inscriptions, au contraire, sont composées dans des caractères purement conventionnels et qui ne ressemblent en rien, par exemple, aux signes didactiques des Mexicains d'avant la conquête. La célèbre inscription érigée sur la mont *Heng-chan*, par ordre de Yu-le-Grand, en commémoration de l'écoulement des eaux diluviennes, a été l'objet de mémoires importants par lesquels Klaproth, Hager, Pauthier, et d'autres, ont établi sa haute et incontestable antiquité. Eh bien! cette inscription, comme celles que nous possédons de la dynastie des *Chang*, est composée de signes dans lesquels l'élément figuratif n'a plus laissé que des traces le plus souvent effacées et qui n'ont en tout cas aucune ressemblance avec les images grossières publiées dans les *Mémoires concernant les Chinois*, dans la *Lettre de Péking*, dans le *Dictionnaire* de Morrison, et ailleurs.

Jusqu'à preuve du contraire, je ne crois pas,—et je suis à cet égard en opposition avec l'opinion généralement accréditée, — à l'existence de textes écrits en caractères absolument figuratifs ou *Siang-hing*.

A la place d'une hypothèse gratuite que l'étude des monuments n'a pas permis de constater, quel système d'écriture trouvons nous en usage dans les inscriptions chinoises des âges les plus reculés! Ma réponse, encore une fois ne s'accordera guère avec les idées généralement acceptées sur la question. Nous trouvons des textes où l'élément phonétique, au lieu d'être un annexe, un complément de l'élément idéographique ou figuratif, est au contraire l'élément essentiel. A ce point que pour un signe aujourd'hui tracé à l'aide d'une clef le rattachant le plus souvent à un certain ordre d'idées déterminé, et d'une phonétique dans laquelle il ne faut voir que le son et oublier l'image, la clef a disparu, laissant à la seule marque du son le soin de rappeler à la pensée le mot de la langue parlée qu'on a voulu noter par écrit. Les textes qui fournissent de nombreux spécimens de cette manière d'écrire, ne remontent évidemment pas aux époques tout à fait primordiales de l'invention de l'écriture, mais elles datent de la première période durant laquelle les Chinois ont commencé à faire de l'écriture un usage général et en quelque sorte populaire.

Puis en descendant le cours des temps, on arrive, en se rapprochant de plus et plus du commencement de notre ère, à trouver des textes chinois savamment composés à l'aide des signes des six classes, *lou-chou*, que nous font connaître les auteurs indigènes, et qui deviennent, après des modifications relativement peu considérables, les signes de l'écriture aujourd'hui généralement adoptée dans l'Empire du Milieu.

La notation du son était donc la notation essentielle, dans les textes chinois des siècles les plus reculés parmi ceux qui nous sont connus.

Une autre étude que j'ai entreprise dans le but de poursuivre mes investigations relatives à la langue et à l'écriture de l'antiquité chinoise,—l'étude du mode de notation graphique du *Chou-king* et surtout du *Chi-king*,—est venue me confirmer dans cette idée, dont les Sinologues comprendront toutes les conséquences, non seulement au point de vue de la philologie comparée, mais même pour l'interprétation et la critique des textes antérieurs au siècle de Confucius. Aujourd'hui que nous possédons, grâce au zèle laborieux et à la profonde érudition de M. James Legge, une savante et magnifique édition des Livres Sacré des Vers, il est facile de constater dans les antiques poësies l'emploi fréquent de signes homophones les uns à la place des autres.

Ce fait une fois admis,—et je ne le crois pas contestable,—il s'agirait de composer le Dictionnaire phonétique des mots du *Chi-king* et de quelques parties du *Chou-king*. A l'aide de ce Dictionnaire, dans lequel on ne devrait tenir compte que dans certains cas spéciaux et avec la plus grande prudence de la notation figurative, on obtiendrait de précieux éléments pour la reconstitution de la langue vulgaire des anciens Chinois. Et ces éléments serviraient, ainsi que j'en ai déjà acquis la conviction, à élucider le sens de bien des mots des Livres Canoniques que les lettrés chinois ne comprennent plus eux-mêmes, et sur lesquels ils ont composés des commentaires aussi longs qu'obscurs et inadmissibles.

Je regrette que le temps ne me permette pas de développer les aperçus qui précédent comme le comportent des questions aussi graves de linguistique et de philologie. Pour répondre au désir qui m'a été exprimé par plusieurs des savants membres de ce Congrès, j'ai dû formuler brièvement quelques uns des résultats des études auxquelles je me livre depuis près de vingt années. Je suis tout disposé à fournir à l'assemblée les explications subsidiaires qu'elle pourrait désirer sur les idées que je viens de soumettre à sa haute appréciation.

RESULTS OF

AN EXAMINATION OF CHINESE BUDDHIST BOOKS

IN THE

LIBRARY OF THE INDIA OFFICE.

By the Rev. SAMUEL BEAL, B.A.

I must apologize for taking up your valuable time this evening; and I assure you I shall be as brief as I possibly can be in submitting what I have to say to your notice.

Having been appointed in September, 1872, to examine and report upon the Buddhist portion of the Chinese Books in the Library of the India Office, I beg now to communicate some of the results of this work.

I find that altogether there are 72 distinct Buddhist compilations in 112 volumes among the Chinese Books in the Library. Of these 47 are translations from the Sanscrit. It is to these my attention has been directed.

1. There are two copies of a work styled the Mo-ho-pan-nyi-pan-king (*i.e.* the Mahaparinibbana Sutta). I was anxious to determine whether this work resembled the Sûtra known by the same name in the Southern School (Ceylon, Burmah, etc.), and, if not, to investigate so far as possible the degree and character of the divergence.

Mr. Turnour had, fortunately, published a brief outline of the Mahaparinibbana Sutta from the Pali, in the Asiatic Society's Journal of Bengal.

It was easy, therefore, by a partial translation of the Chinese version, to observe the resemblance, if any, between the two works in question.

I found that whilst the general outline of the Chinese version was perfectly in accord with the Southern work, that in detail and in spirit the two were in no way allied.

The general outline is this: Buddha, on a certain occasion, proceeded to Kusinagara, and entering a grove of Sala trees, there reposed. He received a gift of food from Chunda, an artizan of the neighbouring town. After partaking of the food, he was seized with illness. He discoursed through the night with his disciples, and disputed with certain heretical teachers. At early dawn he turned on his right side, with his head to the North, and died. The Śala trees bent down to form a canopy over his head. The account then proceeds to relate the circumstance of his cremation, and the subsequent disputes between the Mallas and others for his ashes.

In these main features the Northern Sûtra is in agreement with the Southern; but when considered in detail, the divergence between the two is great. The whole of the First, and some portion of the Second, Book of the Chinese edition is occupied by the narrative of Chunda's offering; the details are most minute and wearisome, consisting of sections of a regularly recurring order.

In the subsequent Books the narrative is occupied with laboured proofs that Nirvâna is not the cessation of Being, but the perfection of it, and that the four characteristics of Nirvâna are these, Personality, Purity, Happiness, and Eternity. One chief peculiarity of this Book is the particular stress it lays on the fact that it was the first made of all the Vâipulya class of Buddhist works, and for that reason it sometimes gives expression to doubts whether or no it would be acknowledged as belonging to the Canon. The history of Buddha's controversies with the heretical Doctors, Kasyapa, Basita, and others, is of an interesting nature, the point of the argument in every case being to prove that Nirvâna is the one true and universal condition of Being, in opposition to all pre-existing theories respecting a future life in Heaven, or that unintelligible state of existence supposed to be enjoyed in the Arupa worlds.

From the consideration of this Sûtra it seems likely that the plan adopted in the later (Northern) school of Buddhism, in the composi-

tion of their works (the Mahâyâna and Vâipulya Sûtras), was to take the shorter and more ancient Scriptures as a germ, and, by the interpolation of dialogues and discussions, and at the same time by tedious expansion of trivial events occurring in the course of the narrative, to produce a work under the same name of a totally different character. This method of development, I think, may be observed in nearly all the works of which we possess both Northern and Southern versions.

2. The above remarks apply with equal force to the Fan-wang-king, another Sûtra in the Chinese Section of the Library. This is a Northern version of the Brahmajâla Sûtra, a work well known through the pages of the *Ceylon Friend*, in which Mr. Gogerly published a brief translation of it. The Chinese version was made by Kumârajîva about 420 A.D., but it has none of the characteristics of the Pali work bearing the same name. As an instance of the dissimilarity, the Chinese version speaks of the origin of the name "Brahmajâla" as connected with the curtain (net, *jâla*) that surrounds the domain of Brahma or Indra,[1] and compares the gems that adorn that net to the countless worlds of space, over all which Vairojana is supreme. Whereas the title is explained in the South as "a net in which Buddha caught the Brahmans."

The Chinese translation is only a portion of the entire work, and recounts the Rules which bind the Bodhisatwa in the same way as the Pratimoksha deals with the Rules of the Bhikshus. All this is so foreign to the drift and object of the Southern Sûtra, that it is plain there is but little connexion between the two, except in the name, which was borrowed probably to give popularity and authority to the expanded work.

3. I discovered that the Library possesses a Chinese copy of the Abhinishkramana Sûtra, under the name of *Fo-pen-hing-tsi-king*. No translation of this work into any European language exists, as far as I know. I thought it therefore desirable to translate the Chinese work in its complete form. This I have done, and I hope soon to see it published. The chief interest attaching to this book is, the number

[1] The expression, Aindrajâla, is a well-known one to signify "jugglery." If the net of Indra be the "Curtain of Stars" which seems to inclose the Atmosphere (Indra), we do not wonder that the idea of jugglery should be associated with it.

of episodes (Avadânas) and Jâtakas contained in it. Some of these will be found to explain the Temple Sculptures at Sanchi and Amravati and Boro Bodor. I am inclined also to think that many of the newly-discovered sculptures found by the Archæological Surveyor of India at Bharhut will be explained to some extent in this work. It seems probable that the book under review is only the expansion of the *Fo-pen-hing-king*, the earliest known translation of the life of Buddha. (This work was produced in China about 75 A.D.) My reason for this opinion is (1) the similarity of name; the addition of the symbol '*tsi*' to *Fo-pen-hing* would indicate that the new work was founded upon the more ancient one. (2) I find from the Buddhist Encyclopædia *Fa-yuen-chu-lin*, that passages quoted from the *Fo-pen-hing* really occur in the *Fo-pen-hing-tsi-king*. If my opinion is correct, it will tend to a settlement of the question of the date of the legends and stories which are mixed up in such a remarkable manner in the history of the founder of Buddhism.

4. Perhaps the most interesting result of the examination of these books is derived from a work entitled *King-Tsang-yo-shwo*. In this book there are fifty Sûtras, translated at different dates and by various scholars, all of them from Sanscrit or Palí. The dates extend from A.D. 70 to A.D. 600. Among these Sûtras is one called the *Chen-tseu-king*; this I found to be a translation of the Sâma Jâtaka, which is in fact a part of the story of Dasaratha and Râma. This Jâtaka has been briefly translated from the Sinhalese by Spence Hardy (*Eastern Monachism*, p. 275), and I have identified it with the Sanchi Sculpture found in plate xxxvi. fig. i. *Tree and Serpent Worship*. The Chinese version of this Jâtaka is full and complete. A singular circumstance connected with the title of this Sûtra or Jâtaka is this—In the history of *Fa-hian's* Travels, p. 157, it is stated that, when in Ceylon, he witnessed on one occasion a Religious Festival, during which pictures of Buddha's previous births were exhibited and hung up on each side of the road. Among others he speaks of the "birth as a flash of light" (the Chinese word is '*chen*'). Rémusat and his annotators having adopted this rendering in their version of *Fa-hian*, I was led to do the same in my own translation, although I had grave doubts at the time, and tried to explain the character of this birth by the history of the Fracolin given by Julien (ii. 336). I now find that the Jâtaka

alluded to by *Fa-hian* is the Sâma Jâtaka, of which the book under review gives an account. It is interesting to know that this Jâtaka was as familiar to the Buddhists in Ceylon at the time of *Fa-hian's* visit (circ. A.D. 410), as it was undoubtedly to the builders and sculptors at Sanchi, some centuries (perhaps) before.

Another of the Sûtras found in the work under consideration is called *Fo-shwo-yen-un-tsang-u-king*, which indeed is a translation of the Sangha Rakshita Avadâna, known to us through the version given by Burnouf (Introd. to Ind. Bud. p. 313, ss.).

The Chinese translation agrees in the main with this version. It opens with an account of the Nâga, which assumed a human form and became a Bhikshu; having gone to sleep, accidentally, his true nature was discovered: after having been instructed in the law, he was dismissed to his Dragon Palace by Buddha; here he was visited by Sangha Rakshita, and further instructed in the Sacred Books. The narrative then proceeds with the adventures of Sangha Rakshita after having been dismissed from the Dragon Palace. (The details are nearly the same as those given by Burnouf.)

A third Sûtra in this work deserving notice is the *Ta-shing-sse-fa-king*, which is the same as the *Arya Chatushka Nirahâra Nâma Mahâyâna Sûtra*, a translation of which has been made by M. Léon Feer (*Etudes Buddhiques*, p. 131). On comparing the Chinese with this version, I find the two agree in the main. There are one or two passages, however, much more distinctly given in the Chinese translation. For example: at the opening of the Sûtra, as translated by M. Léon Feer, there is an obscure passage, which he renders "*n'ayant tous pour vêtement qu'un grand amulette*" (*Mâha-varma-sannaddha*); in the Chinese the passage runs thus—'*Kai-pi-kin-ku-ta-sze-shai-kwan*,' that is, "all of them completely armed with the helmet of their strong religious vows," a passage which, although somewhat obscure, is yet common enough in Buddhist books, denoting the power of the vow made by the Bodhisatwas not to give up their condition till they had accomplished the salvation of men (and others).

Another passage, p. 134 (*op. cit.*), is thus given by M. Feer— "*Le fils d'un dieu reprit Manjuçri en faveur de Brahma qui a les cheveux noués au sommet de la tête et qui reside parmi les fils des dieux, etc.*," but in the Chinese version the rendering is, "The Deva once more replied, Well said! Ayushmat, the Bodhisatwa ought to be untiring

in the works of his religious duties, as in old time was the Brahmarâja Sikhin and his associates, etc." The conduct of Sikhin is frequently alluded to in Buddhist books; he is generally indeed spoken of as one of the old Buddhas, but his exact religious conduct is the theme for constant laudation in the 'Abhinishkramana Sûtra. There are several discrepancies between the Chinese text and the translation from the Thibetan, which I cannot enter into at any length; the following will serve as examples:—iv. 1. "*Meditation.*" *Chinese*: "Faith." iv. 2. "*Sagesse.*" *Chinese*: "Reliance on a virtuous friend." v. "*Production de pensée a laquelle il serait dangereux pour les Bodhisatwas de se confier.*" *Chinese*: "The Bodhisatwas ought to strive after a heart not capable of the four defilements." vi. 3. "*La pensée qui consiste à ne pas espérer en la maturité parfaite.*" *Chinese*: "A heart that does not anxiously look for the reward of good actions." ix. 2. "*Production d'un pensée pour que ceux qui transgressent, etc.*" *Chinese*: "Having been wronged by any one, not to remember the wrong done." ix. 3. "*En quelques contrées vastes et étendus, etc.*" *Chinese*: "Not to remit any effort although dwelling in the midst of plenty (5 desires)." x. 1. "*Quand on est dans une maison.*" *Chinese*: "When leading a secular life." x. 4. "*Amoindrir les qualités de l'agitation, etc.*" *Chinese*: "To practise the Dhûta rules." xi. 4. "*Quand on a lié sa pensée à la promulgation de la loi, etc.*" *Chinese*: "Out of a glad heart ever to speak well of the conduct of a Master of the Law (Spiritual Master)." xvii. 2. "*Le trésor caché de l'énergie.*" *Chinese*: "The treasure of dialectics; or, of logical discussion." xvii. 4. "*Le trésor caché de la bénédiction complète en richesses inépuisables.*" *Chinese*: "The treasure of worshipping or paying reverence to the highest riches, *i.e.* the *Three Gems*, Buddha, Dharma, Sangha." [I may observe here, throughout the translation from the Thibetan the expression "bénédiction complète" (vi. 4, xvi. 4, xvii. 4, xxxiii. 2) corresponds to *Hwui-hiang* in the Chinese, which is a phrase employed to denote an act of *external worship*, or sometimes *mental adoration.*]

The Chinese version throws some light on the difficult passage xxii. 4, "*Ne plus espérer en la transmigration à cause du désespoir de réussir dans la réalisation parfaite de toutes les qualités.*" *Chinese*: "Not to resent as a personal injury (with a view to retaliate) because a friend has not been invited with others to partake of charity or hospitality."

These remarks might be continued, but I pass on to observe, in the work under consideration, there is also a Chinese version of the "*Chatur Dharmaka,*" according to the Great Vehicle. A translation of this also has been made by M. Léon Feer, from the Thibetan (*op. cit.* p. 68). The Chinese version dates from the Tang Dynasty, and was made by Devakara, a priest of mid-India. It agrees very closely with the Thibetan.

I shall now proceed to give a list of other Sûtras, translated into Chinese, and found in the work under review.

(*a*) *Fo-shwo-fan-pih-un-sing-king* (Buddha declares the causes which produce birth). [This may be the same as the Nidâna Sûtra.]

The scene is laid by the banks of the Nairañjana River, under the Bodhi Tree; Buddha, lost in contemplation, dwells upon the falsity of all sources of joy and sorrow in the world. On this Mahâ Brahmâ, Lord of the Sa-va world, suddenly leaves the Heavens and appears before Buddha. Buddha recounts to him the causes of existence (Nidânas); these are the same as those commonly found in Buddhist books, beginning with ignorance (avidya) and ending with old age, disease, and death. Whereupon Mahâ Brahmâ worships at the feet of Buddha and departs.

(*b*) *Fo-shwo-ta-sing-i-king* (Buddha relates the great and secret principles (Truth) of Birth).

The scene of this Sermon is the village of Kuru. Ananda having been troubled with thoughts respecting the origin of life, resolves to go to Buddha and request an explanation. Having arrived and saluted the All-Wise, he spake thus: "World-adored! as I dwelt alone and revolved in my mind throughout the night the causes of life and death, I was greatly troubled. Would that you would deign to solve my doubts and explain my difficulties." On this Buddha proceeds to show how the perpetual recurrence of birth and death, and all the phenomena of life, result from ignorance of the causes of these things. Thus old age and death result from birth: destroy the seed of birth, and there can be no old age or death (and so throughout the Sermon).

(*c*) *Fo-shwo-u-kwo-king* (Buddha recites the history of U-Kwo) (*defend-country*).

This Sûtra recounts how Buddha, when residing at Kuru, departed

on a round of visits for the purpose of preaching. Having come to the village of To-lo (Tara?), he was requested by a young Brahman called U-Kwo to admit him into his society as a novice. Buddha inquired if he had his parents' permission. On being told he had not, Buddha declined to receive him. On this U-Kwo departs to his home, and after a great deal of entreaty he persuades his parents to permit him to become a Bhikshu. This having been accomplished, U-Kwo after a time returns to his native village, and whilst there is the means of converting the King of Kuru by his teaching. On this the king becomes a Upâsaka.

(*d*) *Fo-shwo-wou-shang-king* (Buddha preaches on impermanency) (Anitya).

This Sermon was delivered at Srâvasti, in the Jetavana; Buddha declares in it that there are three things in the world that are universally abhorred, viz.—old age, disease, and death. Had it not been for these, Buddha would not have come into the world. He then recites some verses to the same effect. After which, all the audience, filled with delight, worship him, and depart.

(*e*) *Fo-shwo-tong-lai-pien-king* (Buddha declares the changes of the future).

This Sûtra was delivered at Srâvasti, in the Jetavana, in the presence of 500 Bhikshus, and all the Bodhisatwas. Buddha describes the way in which Religion (the Law) will be destroyed by the neglect of first principles—morality, submission, self-discipline, and so on. He tells them that there will be jealousies and divisions amongst his followers after his own departure, and warns them against the ruin which will result.

(*f*) *Shi-shen-nieh-taou-king* (The Sûtra which relates to virtuous principles, or, a virtuous Karma).

This Sûtra was delivered in the Palace of Sâgara, a Nâgarâja, in the presence of 800 Great Bhikshus, and 23,000 Bodhisatwas Mahâsatwas; Buddha declares that all the differences which exist in life, and comparative conditions of happiness, result from the previous conduct of the persons concerned.

He then lays down ten virtuous principles, by acting on which there must result consequent perfection and supreme wisdom (Bodhi). The ten virtues are purely moral and personal, relating to benevo-

lence, love of men, self-denial, energy, and watchfulness against error.

(*g*) *Fo-shwo-fa-yin-king* (Buddha declares what is the seal of the Law).

This Sermon was delivered at Srâvasti, before all the Bhikshus. In it Buddha declares that the secret, or the seal, of the Law, is to perceive the unreality of all phenomenal existence, and, by a conviction of this, to arrive at deliverance. [Deliverance is spoken of as threefold, and is thus denoted ₀°₀.]

(*h*) *Pu-sa-sing-ta-king* (The Sûtra of the ground of the birth of a Bodhisatwa).

This Sûtra was delivered at Kapalivastu, under a Nyagrodha tree, in the presence of 500 Bhikshus. A young nobleman, called Chamâh, comes to Buddha, and begs him to explain the nature of a Bodhisatwa's conduct. On this Buddha lays it down that the fundamental principle of a Bodhisatwa's character is perfect patience and forbearance, and this patience exhibits itself under four aspects. (1) When reviled, the Bodhisatwa reviles not again. (2) When smitten, he receives the blow without resentment. (3) When treated with anger and passion, he returns love and good will. (4) When threatened with death, he bears no malice. Buddha then recites some verses (Geyas) to the same effect. Again, he says, there are four things that distinguish every Bodhisatwa. (1) He loves the Scriptures, and the way of salvation practised by the Bodhisatwas; with his utmost mind he defends the cause of Religion, and desires to instruct men therein. (2) He removes himself from the company of all females, and will have no business with them. (3) He ever loves to bestow charity on Shaman and Brahmachari. (4) He avoids over-sleep, lest his heart should become indisposed to Religion. Buddha then recites some verses to the same effect. On this, Chamah removes from his neck a beautiful string of pearls and precious stones, and offers them to Buddha. Buddha, by his spiritual power, causes them to ascend into the air, and form a canopy over his head. And now, from each precious stone, there appears as it were a man, to the number of 500, each wearing a similar necklace. On this, Chamah asks whence these persons came — to which Buddha replies, they come from nowhere; they are unreal and apparitional only, as a figure in a glass, or the

reflexion in a lake: and such is the nature of all phenomena, they are unreal, projected on the surface of the one reality, Supreme Wisdom (Bodhi). Such is the belief of the Son of Buddha, *i.e.* Bodhisatwa.

On hearing this, Chamah, the four kinds of disciples and all the Nâgas, rejoice and accept it.

(*i*) *Fo-shwo-chuen-yeou-king* (Buddha delivers the Sûtra which relates to the revolution of existence).

This Sûtra was delivered in the Kalanda-venu-vana near Râjagriha, in the presence of 1,250 disciples and innumerable Bodhisatwas. Bimbasâra râja having approached the place where Buddha was seated, saluted him and stood on one side. On this Buddha addressed him thus, "Mahârâja, suppose a man in a dream beheld a lovely maiden, bedecked with jewels; and suppose he dreamt of joys and pleasures partaken with her—would there be any solid truth in such fancied enjoyments?" "No!" answered the Raja, "for it would be only a dream." "And if a man were, nevertheless, to hold to the fancy that there was such a real maiden as he had seen in his sleep (or that the maiden were a real one), would this be a mark of wisdom?" "No!" answered the king, "for that dream-thought had no substance and was utterly vain." Such, continued the Buddha, is the nature of the teaching of all the heretical Doctors of Religion. They use words to describe things which exist not. They receive certain impressions from without, and then they lay hold of these vain impressions and call them realities. They are thus bound by their own fictions, and being bound, they become subject to all the evil consequences of their own inventions, viz.—covetous desire, anger, doubt (raga, moha, trishna), and perpetual cycles of birth and death. By giving up such imaginary names and laying hold of the one reality, a man escapes these consequences and is set free.

(*j*) *Ta-fang-tang-sieou-to-lo-wang-king.*

This is another translation of the previous work, the title is a singular one, and may be translated thus—The Mahâvâipulya-Sûtra-râja Sûtra.

(*k*) *Shan-king-fa-siang-king* (The Sûtra which relates to the thoughts present to those who practise Dhyâna).

Delivered at Srâvasti, in the Jetavana; Buddha spoke thus to the

Bhikshus: "If a man, in the snapping of a finger, can realize in his mind the thought of death, and remember, perfectly, that all which exists must die—this is no small progress to have made—this is not the hesitation of the foolish, or the charity of the Arab (*sih kwo yin*). How much more, if he can grasp in a moment, the thought of the sorrow, the impermanency, the vanity, the folly, etc., of earthly things—how much more has such a man advanced in the power of Dhyâna!"

(*l*) *San-kwei-wu-kiai-sse-sin-im-li-kung-tih-king* (The Sûtra that describes the great merit attaching to the three refuges (tun-sarâna), the five moral rules, a loving heart, and rejecting the evil).

Delivered at Srâvasti, in the Jetavana, for the sake of Aniruddha; Buddha speaks of a rich Brahman, called Virama, and explains that, though he gave away all his wealth in charity, his merit would not be nearly so great as one who professed belief in Buddha, Dharma, and Sangha, and undertook to observe the five rules of a disciple.

(*m*) *Fo-shwo-hi-yeou-kan-liang-kung-tih-king* (Buddha delivers a discourse concerning the Supreme source of merit).

This Sermon is directed to show the infinitely superior character of merit resulting from a profession of belief in the three gems, to all others.

(*n*) *Li-hu-hwui-pu-sah-sho-man-li-fo-fa-king* (Questions asked by a Bodhisatwa, called *Li-hu-hwui*, as to the right way of paying worship to Buddha).

This Sûtra was delivered at Srâvasti, in the Jetavana. The interlocutor is the Bodhisatwa named in the title. He asks Buddha to explain the right method of worship. On this Buddha tells him that he should, with all his heart, pay adoration to all the Buddhas of the ten quarters, and afterwards prostrate himself on his knees, hands, and head to Buddha himself, beseeching him to bring about the salvation of all men, and cause an end to be put to all heretical teaching. He then proceeds to direct him to worship each of the Buddhas of the different Regions of space, beginning with Akshobya of the Eastern Region, down to Vairojana, who is placed in the Nadir.

(*o*) *Fo-shwo-ta-shing-pih-fuh-siang-king* (Buddha declares what are the hundred marks of merit belonging to the Great Vehicle).

This Sûtra was delivered at Srâvasti, in a Palace called Po-Miu. The interlocutor is Manjusrî. In it is given the names of the eighty inferior signs and the thirty-two greater signs on Buddha's person, also eighty symbols or figures found on the soles of his feet.

(*p*) *Man-chu-sse-li-man-po-ti-king* (Manjusrî inquires as to the character of Bodhi).

This Sûtra was delivered in Magadha, on Mount Gayâ, in the presence of all the Bhikshus, and those Brahmans who had been converted by Buddha; the subject of it is the nature of that condition of mind called the "Heart of Bodhi" (*Esprit de Bodhi*).

(*q*) *Wou-tsun-hwui-pou-sah-king* (The Sûtra of Akchayamati Bodhisatwa).

This Sûtra was delivered at Râjagriha, on Mount Gridrakûta, in the presence of 1,250 Bhikshus. The interlocutor is Akchayamati, who inquires of Buddha the nature of the heart of Bodhi (as in the previous Sûtra).

(*r*) *Ta-shing-sze-fa-king* (The Sûtra of the four rules of the Great Vehicle).

This is the same as the Mâhâyana-chatur-dharmaka Sûtra. It was delivered at Srâvasti, in the garden of Jeta (and has already been referred to).

(*s*) *Fo-shwo-ta-shing-sze-fa-king* (Buddha declares the four laws of the Great Vehicle).

This Sûtra has already been referred to.

(*t*) *Fo-shwo-pou-sa-sheou-hing-sze-fa-king*. Another translation of the above.

(*u*) *Fo-shwo-tsing-nieh-chang-king* (Buddha narrates the obstacles in the way of a pure Karma).

This Sûtra was delivered when Buddha was dwelling at Vaisali, in the garden of the Amra trees, in the presence of 500 Bhikshus and 32,000 Bodhisatwas Mahâsatwas. It relates to a conversation between a courtesan and a Bodhisatwa called Vimalanirbhâsa (*wou-hu-kwong*). The former, having used her magic arts, prevails over the Bodhisatwa.

After this, being seized with intense remorse, he comes to Buddha; the latter comforts him by an assurance that all such things are as a shadow and a dream, on which the Bodhisatwa is re-assured. Manjusrî then enters into a discussion with Buddha relating to the character of the Great Vehicle.

(*v*) *Tchin-u-ta-shing-kung-tih-king* (Buddha praises the superior excellency of the Great Vehicle).

In this Sûtra Buddha describes the superiority of the Heart of Bodhi, and from that proceeds to define the infinite virtue of the Great Vehicle. (This Sûtra was translated from Sanscrit by Hiouen-Tsang.)

(*w*) *Ta-shin-fang-kwang-tsung-chi-king* (The Sûtra which describes the nature of the Dhâranî, used in the Yoga system of the Great Vehicle).

This Sûtra was delivered at Râjagriha, on the Gridrakûta Mountain, in the presence of 62,000 Great Bhikshus. It contains certain Dhâranî.

(*x*) *Wou-shang-i-king* (The Sûtra of the highest reliance).

This Sûtra, which is in two parts, contains an account of the relative merit of various actions. It was delivered in the Kalanda-venuvana, before 1,250 Bhikshus and various Bodhisatwas.

(*y*) *Fo-shwo-lo-niu-yin-king* (The Sûtra in which Buddha describes the conduct of an aged woman).

This Sûtra was delivered by Buddha at a place called Lo-Yin (musical sound), before 800 Bhikshus and 10,000 Bodhisatwas. He describes the conduct of an aged woman who desired to offer him a religious gift. Having only two small coins (mites), she purchased with them a little oil: taking this to a sacred place, she used it in a lamp, to burn for his honour. The lights of all the Brahmans were extinguished, and hers alone burnt incessantly.

(*z*) *Fo-shwo-chen-tseu-King* (Buddha relates the History of Sâma).

This is the Sâma Jâtaka referred to before.

(*aa*) *Tin-wong-tai-tseu-Pi-Lo-King* (The Sûtra of Pi-Lo, the eldest son of a Heavenly King [Devarâja]).

This Sûtra gives an account of Devarâja-kumâra-Pi-Lo's visit to

Buddha, during which he recites the History of the Great Brahman, which is identical with the Avadâna translated by Stas. Julien, called "*Le roi et le grand tambour*" (*Les Avadânas*, Vol. I. No. 1).

(*bb*) *Fo-shwo-O-che-shai-wong-shau-ki-king* (The Sûtra of Ajâtasatru's assurance).

This Sûtra was delivered at Râjagriha, on the top of the Mountain Gridrakûta, and contains an account of Ajâtasatru's visit to Buddha, and the assurance that he would hereafter become a Chakravartti Râja.

(*cc*) *Fo-shwo-tai-tseu-Muh-pih-king* (Buddha declares the History of Prince Muh-pih).

This Sûtra was delivered at Srâvasti, in the Jetavana. Buddha recounts the History of the Prince Muh-pih, the son of Varanirâja. He was a beautiful child, but unable to speak; having consulted the astrologers, they resolved to put him to death, by burying him alive; when on the point of being thus sacrificed, he opened his mouth, and spake: he declared that, owing to rash words in a former birth, he had suffered punishment in hell. He had resolved, therefore, to remain silent, rather than risk a like punishment. (This Sûtra is one of the earliest translated into Chinese, A.D. 100.)

(*dd*) *Fo-shwo-'ng-wong-king* (Buddha declares the history of the five kings).

There were once five kings, one of whom was wise, the other four were foolish. The Wise King, wishing to convert the others, asked them their several ideas of happiness. The first said, "Nothing would delight me more than during the spring-time to wander through gardens and parks, to see the flowers and watch the fountains. This would be pleasure."

The second said, "Nothing would delight me more than as a king to mount my royal horses, to dwell in a lordly court, and ever to be surrounded by my faithful subjects paying me reverence."

The third said, "Nothing would delight me more than the joys of wedded life, surrounded by my children, beautiful and full of grace, ever desiring to give me happiness."

The fourth said, "Nothing would delight me more than to dwell ever with my parents, in company with my brothers and sisters, with the daintiest food, clothed in the costliest raiment, and enjoying the

indulgences of sense." The four having thus spoken, the Wise King replied, "All these things are vain and perishable; for my part, I would desire nothing so much as a condition that admits of neither birth nor death, joy nor sorrow, or any other extreme." On which the others replied, "And where shall we find a Teacher who will explain how this condition may be reached?" Whereupon the Wise King conducted them to the presence of Buddha, at the Jetavana Vihâra. Buddha then enters on a discourse, in which he describes the eight kinds of sorrow which are incident to all conditions of life. In the end the four kings are converted.

(*ee*) *Fo-shwo-kin-che-'ng-fuh-ti-king* (Buddha declares the five conditions of happiness belonging to the virtuous man).

This Sûtra was also delivered at Srâvasti, in the Jetavana Vihâra. Buddha declares that the virtuous man is in this life rewarded in five ways,—first, with long life; second, with great wealth; third, with graceful form; fourth, with honour and renown; fifth, with much wisdom. He then proceeds to explain the character of the truly virtuous man.

(*ff*) *Fo-shwo-U-lan-pwan-king* (Buddha declares the Avalambana Sûtra).

This Sûtra was delivered at Srâvasti, in the Jetavana Vihâra. Mahâ Mugalan, by the exercise of his spiritual power, beholds his mother suffering as a Preta from starvation; on proceeding to her side and offering her food, she was unable to receive it, as it was changed into burning ashes in her hand. On this he went, with many tears, to Buddha, and declared his great sorrow. Whereupon Buddha ordains a service to be held on the 15th day of the seventh month, for the purpose of providing food for all those suffering torments of hunger as Pretas. Mugalan, with great joy, performs this service, and so provides his mother with food.

(*gg*) *To-fong-kwang-fuh-hwa-yen-king-sieou-sse-fun* (The charity section of the Mahâvâipulyâvatamsaka Sûtra).

This Sûtra was delivered at Râjagriha, on the Vulture-peak Mountain. It is a part of one of the most popular Sûtras known in China, viz. the Fa-yen-king.

(*hh*) *Fo-shwo-yin-kin-sang-hu-king.* (Buddha narrates the history of Sangharakshita).

This is the Avâdana referred to before, and fully translated by Burnouf.

I shall now proceed to translate a short Sûtra called. "Buddha's Dying Instruction" (*Fo-wei-kiau-king*). The interest of this work is derived from the fact that it is generally bound up in China with the "Sûtra of Forty-two Sections," the first Buddhist work translated into Chinese. It will be seen that it is of a primitive type, and deals entirely with moral questions. It also speaks of the "Pratimoksha," not as that work is known to us, but as certain Rules of a simple prohibitive character, affecting the life of the disciple. It would appear from this that the bulky work now known as the Pratimoksha is a later compilation, drawn up in fact after the introduction of conventual life among the followers of Buddha.

5. "The Sûtra of Buddha's Dying Instruction," translated by Royal Command, by Kumârajîva, a Doctor of the Three Piṭakas, in the reign of Yaou (Hing), Prince of T'sin [397 to 415 A.D.] [*T'sin*, a feudal state, occupying the Region of the Rivers Wei and King] [vid. for the date Jul. i. p. 322].

Sâkyamuni Buddha, when he first began to preach, converted Adjñâta Kâundinya (O-jo-kiao-tchin-ju); so, on the occasion of his last discourse, he converted Subhâdra. Having thus done all that was appointed him to do, he reclined between two Sâla trees, about to enter Nirvâna. It was now in the middle of the night, perfectly quiet and still; on this occasion, for the sake of his disciples, he delivered a brief Summary of his Law.

"Bhikshus! after my death, regard, I pray you, with much reverence, the Book of the Pratimoksha, as a light shining in the darkness; or, a precious pearl found by a poor man. Let this Book be your Teacher and Guide, even as I should be, if I remained in the world. Keep the pure Rules of discipline, viz. these—Not to enter on any business engagements, whether buying or selling, or exchanging; to avoid all purchase of land or houses; all rearing of cattle, or dealing in servants or slaves, or any living thing; to put away all money, property, or jewels—as a man would avoid a burning pit. Not to cut down or destroy trees or shrubs; not to cultivate land, or

dig the earth; not to engage in the decoction of medicines; not to practise divination, or casting lucky or unlucky days; not to study the stars or the movements of constellations; not to predict times of plenty or scarcity; not to enter on calculations of any sort: all these things are forbidden. Keep the body temperate in all things, and the vital functions in quiet subjection. Have nothing to do with worldly engagements, either in seeking places of authority, or pronouncing incantations, or courting the rich, or planning for the welfare of your worldly relatives. But, by self-control and right modes of thought, aim at emancipation; conceal none of your faults, but confess them before the congregation; be moderate and contented with the food, clothing, medicines, and bedding allowed you [*Jul.* i. 152], and be cautious against hoarding up that which is allowed. These are the Rules of Discipline, the observance of which is the true source of emancipation, and hence they are called 'The Rules of the Pratimoksha.' Keep then these precepts in their purity, oh Bhikshus! Let there be no careless negligence in this matter; the man who carefully observes them shall have power to fulfil all the duties of Religion; the man who disregards them shall experience none of the rewards which a virtuous life is able to afford. And for this reason it is I bid you remember that the knowledge and practice of these Rules is the first and chief necessity for attaining religious merit and final peace.

"If, Bhikshus! ye have attended to this point, and have observed the precepts religiously, then continue to keep the five organs of sense in due check, not permitting them a loose rein, or to engage in the pursuit of pleasure (the five pleasures); just as a shepherd with his crook prevents the cattle from straying into the neighbouring pastures. But if you restrain not your senses, but permit them the indulgence of the five pleasures, and put no check upon them, then, like a vicious horse unchecked by the bridle hurries on and throws its rider into the ditch, so shall it be with you; your senses getting the mastery of you, shall eventually hurry you on to the place of torment, where you shall endure untold misery for the period of an age (*sæculum*), without any mode of escape or deliverance. The wise man, therefore, restrains his senses, and permits them not free indulgence—he keeps them fast bound, as robbers are held in bonds, and doing so he soon feels their power to hurt utterly destroyed. The heart (sin) is Lord of these

senses; govern, therefore, your heart well; watch well the heart, for it is like a noxious snake, a wild beast, a cruel robber, a great fire, and worse even than these. It may be compared to a man who is holding in his hand a vessel full of honey, and as he goes on his way his eyes are so bent in gazing on the sweet treasure in his dish, that he sees not the dreadful chasm in his way, down which he falls. It is like a mad elephant unchecked by the pointed crook—or like the ape which is allowed to escape into the tree, quickly it leaps from bough to bough, difficult to re-capture and chain up once more. Restrain, therefore, and keep in complete subjection your heart; let it not get the mastery; persevere in this, oh Bhikshus! and all shall be well.

"With respect to food and drink, whether you have received common or dainty food, let it not excite in you either undue gratification or regret; and the same with clothing and medicinal preparations—take sufficient and be satisfied; even as the butterfly sips the honey of the flower and departs, so do ye, oh Bhikshus! seek not more than is necessary: be satisfied with what is given to you, just as the wise man calculates the strength of the ox he uses, and gives it as much food as is necessary for it.

"Be careful, oh Bhikshus! to waste no time, but earnestly to persevere in acquiring a knowledge of the true Law. On the first and last nights of the month continue in the repetition of the Sacred Books without cessation. It is sloth and love of sleep that cause a whole life to be thrown away and lost.

"Think of the fire that shall consume the world, and early seek deliverance from it, and give not way to sleep. A man who indulges in immoderate sleep can have no inward satisfaction or self-respect; there is always a snake of dissatisfaction coiled up in his breast: whereas he who denies himself this indulgence is like the man who rises early, and, sweeping out his house, expels all that is hurtful, and so has continual safety and peace. Above all things, let modesty govern every thought and every word of your daily life—a man without modesty is in no way different from the brute beast.

"Bhikshus! if a man should do you such injury as to chop your body in pieces limb by limb, yet you ought to keep your heart in perfect control; no anger or resentment should affect you, nor a word of reproach escape your lips; for if you once give way to a bitter

thought, you have erred from the right way, and all religious merit is lost. Patience is a virtue (*this is the literal translation of the passage 'Jin che wei tih'*); to keep the Rules of moral restraint without wavering, to exercise patience without tiring, this is the characteristic of the great man. If a man, because he does not enjoy everything as he would wish, loses patience, he is like a man who will not enter on the Path of Salvation, because he cannot immediately quaff the sweet dew (*i.e.* attain immortality)."

The Text then proceeds to speak of the advantage of moderation in all indulgences (pleasures), the happiness of a solitary life; "for they who live in mixed society are like the birds that congregate together in a tree, always afraid of the traps of the fowler; or like the old elephant in the mud unable to extricate himself. Continual perseverance is like a little fire that keeps on burning, but he who tires in the practice of Religion is like a fire that goes out. Such is perseverance (*vîrya*).

"You ought, also, never to forget self-examination and reflection (*nim, i.e.* sraddha); if you neglect these, then all progress is at an end—in the practice of these you put on, as it were, a helmet of defence, so that no sword can hurt you, and no enemy get the advantage over you.

"You ought to keep your mind fixed in contemplation (*dhyâna*) —by perseverance, this power of fixed contemplation is always ready, even as water kept in the house is always ready for laying the dust out of doors. And so he who continues in the practice of dhyâna shall undoubtedly attain wisdom (*Prajña*); and this is the Deliverance spoken of in my Law. And true wisdom is this: to cross the sea of old age, disease, and death, in a strong and trustworthy boat. It is a lamp shining in darkness, a medicine for all diseases, a hatchet to cut down the tree of sorrow, and for this reason you ought to aim above all things to attain this wisdom, and so bring to yourself lasting benefit. A man who has this wisdom is perfectly illuminated, and needs no other eyes.

"Again, Bhikshus, if ye would obtain final release, you must put away from you all the foolish books (trifling discourses) met with in the world. Think only on the words I have given you, whether in the mountain pass or the depth of the valley, whether beneath the tree or in the solitary cell; think of the Scriptures (Law), and forget

them not for a moment, persevere in studying them alone; I, as the good Physician, knowing the disease which affects you, give this as a medicine fit for the case: without this, you die. Or, like the guide who knows the way, I direct you where to go and what path to take: without a guide, you perish.

"And now, if you have any doubts respecting the four great truths which lie at the bottom of my teaching, ask me, oh Bhikshus! and explain your doubts; for while you doubt there can be no fixity."

This exhortation the world-honoured one repeated three times, but neither of the Bhikshus propounded any question, for so it was, they had no doubts.

Then Aniruddha, reading the hearts of the congregation, addressed Buddha, and said: "World-honoured! the Moon may diffuse heat and the Sun cause cold—but there can be no difference as to the truth and meaning of the four great doctrines which Buddha has placed at the bottom of his system.

"There is the great Truth of 'Sorrow' (*dukha*). Sorrow can never co-exist with joy, or produce it. 'Concourse' (the expression "concourse," generally translated "accumulation," evidently refers to the "rush" or "concourse" of thoughts and events, experiences and anxieties, as the true cause of sorrow), this is the true cause (of sorrow), besides this there is no other. The 'destruction of sorrow' is just the destruction of cause, 'no cause, no fruit;' and 'the way' is this very way by which the cause may be destroyed, and this is the 'true way,' and there is no other.

"World-honoured one! the Bhikshus are firmly fixed in these doctrines: there is not the shadow of a doubt, there is no question or difference of opinion in the congregation respecting them. The only thought which affects the congregation is one of grief that the world-honoured one should be about to depart and enter Nirvâna, just as we have begun to enter on the practice of his Law and understand its meaning; just as in the night a flash of lightning lights up the way for the weary traveller and then is gone, and he left to wander in the dark; this is the only thought which weighs on the mind of the congregation."

Nothwithstanding the assurance of Aniruddha, the world-honoured one, wishing that every member of the congregation should be strong

in his belief, and attain perfect assurance, again, out of his compassion, addressed them, and said:

"Bhikshus! lament not at my departure, nor feel any regret; for if I remained in the world through the Kalpa (*i.e.* to the end of the world), then what would become of the Church (assembly)? it must perish without accomplishing its end! and the end is this: 'by personal profit to profit others.' My law is perfectly sufficient for this end. If I were to continue in the world, it would be for no good; those who were to be saved are saved, whether Gods or men; those who are not saved, shall be saved, by the seeds of truth I have sown. From henceforth, all my disciples practising their various duties, shall prove that my true Body, the Body of the Law (dharmakâya), is everlasting and imperishable.

"Be assured of this, the world is transitory; dismiss your sorrow, and seek deliverance; by the light of wisdom destroy the gloom of all your doubts. The world is fast bound in fetters and oppressed with affliction, I now give it deliverance, as a physician who brings heavenly medicine. Put away every sin and all wickedness; remember that your 'body' is but a word coined to signify that which does not really exist—ford across the sea of death, old age, and disease—Who is the wise man that does not rejoice in the destruction of these, as one rejoices when he slays the enemy who would rob him?

"Bhikshus! keep your mind on this; all other things change, this changes not. No more shall I speak to you. I desire to depart. I desire Nirvâna. This is my last exhortation."

6. Another Sûtra worthy of notice is the *Chong-Lun*, or *Pranya-mula-shastra-tika*, by Nagârjuna.

I shall proceed to give the translation of the 25th Section of this work on Nirvâna.

(1) If all things are unreal,
Then how is it possible to remove
From that which does not exist
Something which, being removed, leaves Nirvâna?

This section argues that if all things are alike empty and unreal, then there is no such thing as birth and death; consequently there can be no removal of sorrow, and the destruction of the five elements

of existence (limited existence), by removal of which we arrive at Nirvâna (what is called Nirvâna).

(2) But if all things are real,
Then how can we remove
Birth and death, real existence,
And so arrive at Nirvâna?

This section argues that we cannot destroy that which has in itself real existence, and therefore, if all things have this real being, we cannot remove Birth and Death, and so arrive at Nirvâna: therefore, neither by the theory of "Bhava," nor by the theory of "Sunyata" (emptiness), can we arrive at the just idea of Nirvâna.

(3) That which is not striven for, or "obtained,"
That which is not "for a time," or "eternal,"
That which is not born, nor dies,
This is that which is called Nirvâna.

"Not to be striven for," that is, in the way of religious action (acharya), and its result (fruit).

"Not obtained" (or "arrived at"), that is, because there is no place or point at which to arrive.

"Not for a time" (or not by way of interruption [per saltum]); for the five skandas having been from the time of complete enlightenment proved to be unreal, and not part of true existence, then on entering final Nirvâna (anupadisesha Nirvâna)—What is there that breaks or interrupts the character of previous existence?

"Not for ever," or "everlasting," for if there were something to be obtained that admitted of distinctions whilst in the possession of it, then we might speak of an *eternal* Nirvâna; but as in the condition of silent extinction (Nirvâna) there can be no properties to distinguish, how can we speak of it as "everlasting"?

And so with reference to Birth and Death.

Now that which is so characterized is what we call Nirvâna.

Again, there is a Sûtra which says, "Nirvâna is the opposite of 'Being' and 'not Being;' it is the opposite of these two combined; it is the opposite of the absence of 'Being,' and the absence of 'not Being.'

"So, in short, that which admits of no conditions such as are attached to limited existence; that is Nirvâna."

(4) Nirvâna cannot be called "Bhava;"
For if so, then it admits of old age and death,
In fact, both "Being" and "Not Being" are phenomena,
And therefore are capable of being deprived of characteristics.

This means that as all things which the eye beholds are seen to begin and to end, and this is what the Slôka calls "Life" and "Death" (or birth and death); now if Nirvâna is like this, then it would be possible to speak of removing these things and so arriving at something fixed: but here is a plain contradiction of terms—for Nirvâna is supposed to be that which is fixed and unchangeable.

(5) If Nirvâna is Bhava (existent),
Then it is *personal;*
But, in fact, that which cannot be individualized
Is spoken of as "not personal."

This means that as all phenomenal existence comes from cause and consequent production, therefore all such things are rightly called "personal."

(6) If Nirvâna be Bhava,
Then it cannot be called "without sensation" (anuvedana);
For non-Being comes not from sensation,
And by this obtains its distinct name.

This means that as the Sûtras describe Nirvâna as being "without sensation" (anuvedana), it cannot be Bhava; for then abhava would come from sensation. But now it will be asked if Nirvâna is not Bhava, then that which is "not Bhava" (abhava), surely this is Nirvâna. To this we reply—

(7) If Nirvâna be not Bhava,
Much less is it nothing (abhava);
For if there be no room for "Being,"
What place can there be for "Not Being"?

This means that "not Being" is the opposite of "Being." If, then, "Being" be not admissible, how can we speak of "Not Being"? (its opposite).

(8) If, again, Nirvâna is Nothing,
How is it called "without sensation"? (anuvedana)
For it would be wonderful indeed if everything not capable of sensation
Were forthwith spoken of as Nothing.

If, then, Nirvâna be neither "Being" nor "Non-Being," what is it?

(9) By participation in cause and effect
Comes the wheel of continual existence,
By non-participation in cause and effect
Comes Nirvâna.

As by knowing a thing to be straight we also know that which is crooked, so by the knowledge of the elements of finite existence comes the knowledge of continual life and death. Do away with those, and you do away also with the other.

(10) As Buddha says in the Sûtra,
Separate "Being," separate "Not Being,"
This is Nirvâna,
The opposite of "Being," the opposite of "Not Being."

"Being" here alludes to the three worlds of finite existence. The absence of these three worlds is "not Being." Get rid of both these ideas, this is Nirvâna. But it may now be asked, if Nirvâna is not "Being" and if it is not "absence of Being"—then perhaps it is the intermixture of the two.

(11) If it is said that "Being" and "Not Being,"
By union, produce Nirvâna,
The two are then one;
But this is impossible.

Two unlike things cannot be joined so as to produce one different from either.

(12) If it is said "Being" and "Not Being,"
United, make Nirvâna,
Then Nirvâna is not "without sensation";
For these two things involve sensation.

(13) If it is said "Being" and "Not Being,"
United, produce Nirvâna,
Then Nirvâna is not Impersonal;
For these two things are Personal.

(14) "Being" and "Not Being," joined in one,
How can this be Nirvâna?
These two things have nothing in common.
Can Darkness and Light be joined?

(15) If the opposite of "Being" and "Not Being"
Is Nirvâna,
These opposites—
How are they distinguished?

(16) If they are distinguished,
And so, by union, become Nirvâna,
Then that which completes the idea of "Being" and "Not Being,"
Also completes the idea of the opposite of both.

(17) Tathâgata, after his departure,
Says nothing of "Being" and "Not Being";
He says not that his "Being" is not, or the opposite of this.
Tathâgata says nothing of these things or their opposites.

"The question of Nirvâna sums itself up in this, that whether past, or present, or to come, it is one and the same condition of non-sensational existence. Tathâgata is ever the same; if he be removed, then Nirvâna itself becomes a mere fancy.

"The conclusion of the whole matter is, that Nirvâna is identical with the nature of Tathâgata, without bound, and without place or time."

From this Section of the *Tchong-lun* we can understand the character of the entire work. It advocates the theory that the true condition of Being (Nirvana), or the nature of Tathâgata, is to be found in the conciliation of differences. Neither Eternal, or non-Eternal, personal, or impersonal—but above and beyond all such verbal limitations.

Fo-shwo-chen-tseu-king.

For 陂 vid. 128 *Jul. Meth.*, as in Kauçambi.

Compare Fa-hian cap. xxxviii. 或, 作, 陂, 鼈. It is evident this is the Sâma Jâtaka.

Sâma is said (E.M. 275) to have been the son of the hermit Dukhula.

In the Ramâyana he is called Serwan. *Talboys Wheeler*, vol. ii. p. 159, n.

The incident is illustrated in the Sanchi Sculptures. *Tree and Serpent Worship*, pl. xxxvi.

It is the 37th Sûtra in the compilation known as *King-tsang yŏ-shwo.*

Thus have I heard. Buddha was once residing in the country of Pi-lo-lah, with a company of 1,250 Bhikshus, and a congregation of Bodhisatwas, ministers, householders, and devout women without number. Having on a certain occasion held a meeting, Buddha addressed the Bhikshus thus: "When my mind and senses are thus thoroughly composed—then I am able to look back through all time, and see all that happened from the first moment I began to acquire the merit of a holy life (*Bôdhisatwa's conduct*)." Ananda having requested Buddha to enter on this subject, he continued: "In ages gone by there was a certain Bodhisatwa, called Yah-tsai-mia-hing, conspicuous for his universal love and charitable conduct. Dwelling in the Tusita Heaven, there instructing the Devas, he every day at three periods of the day looked throughout the ten regions to see what was the advance of goodness or crime amongst men; and whatever piety there was on the part of child to parent, or in other relationships, he by his divine sight detected it at once.

"At this time in the Ka-i (Kasi) country there was an old man who had no child, and both he and his wife were blind. They desired to become hermits. Then the Bodhisatwa thought thus: This man, being blind, desires to become a recluse, and he will inevitably fall into all kinds of dangers and perils. I will myself become his son. On this, the Bodhisatwa's days in Tusita having come to an end, descended to earth, and was born in the house of the blind couple. And now they were filled with joy, and doated on their child, and were resolved to continue in the world, and not become solitary hermits.

"When the child was ten years old, they called him Chen-tseu (Sâma-putra). He was a most dutiful child, and practised the ten moral virtues incessantly—not to kill, not to steal, not to commit adultery, not to deceive (K'i), not to drink wine, not to lie, not to slander, not to envy, not to hold heretical views, and always day and night to serve and honour his parents. And in every other way he was gentle and complacent to all around him, and was the joy of his parents' life. After arriving at the age of ten, Sâma bowed down at his parents' feet, and said, 'Dear parents, I wish to become a recluse, and to give up the world; would that you would permit me so to do, and accompany me into the solitary mountains, that we might there

practise the life of religious persons who have forsaken the world!' His parents having consented to this arrangement, Sâma gave away all his worldly goods amongst the poor, and then, in company with his parents, sought the solitude of the mountains. Having reached a favourable spot, Sâma constructed a shelter of leaves and branches for his parents, and prepared a sufficient covering for them to take repose, so that they neither suffered from cold nor heat. After living thus for one year, provided by their son with every necessary—the sweet fruits that grew in the neighbourhood, and the cool water that ran by—protected from the rain and the sun's rays, surrounded by the birds and beasts of the forest, who showed no signs of fear, but delighted the blind couple with their songs and friendship, the deer coming at Sâma's call, and all the tenants of the forest following him wherever he moved—it so happened in the midst of all this that Sâma went down to the neighbouring stream, clad in his deer-skin coat, and with his pitcher in his hand, to fetch some water for his parents, who were now feeling the inconvenience of thirst, whilst herds of deer and feathered fowls were also drinking by the river's bank, without fear or thought of harm at Sâma's presence.

"At this time it happened that the King of the country of Ka-i (Kasi) had gone out to hunt in the mountain wilds. Coming near to the river where Sâma was, and seeing the herd of deer and the birds assembled there, he drew his bow and shot an arrow into their midst. The arrow pierced Sâma in the midst of his body. The boy, feeling the anguish of the poisoned barb, cried out in his pain, 'Who has shot this poisoned arrow, and wounded me, a hermit boy?' (*Sambódhi* man). The King, hearing his voice, dismounted from his horse, and went straight to where Sâma was. The boy then addressed the King, and said, 'An elephant when dead has ivory teeth; a rhinoceros is killed for its horn, a kingfisher for its feathers, a deer for its skin; but as for me, who is it would kill me? I have neither teeth of ivory, nor horn, nor feathers, nor skin of deer; my flesh is useless for food; what evil then have I done that I should be thus ruthlessly shot dead?'

"The King answering said, 'But who are you, clad in that deer-skin doublet, and consorting with the wild herds of the forest?'

"Sâma replied, 'I am one of Your Majesty's subjects, who, with my blind father and mother, am practising the life of a hermit. For twenty years or more we have not been molested either by tiger or

wolf, or poisonous insect, but now at last I am wounded to death by the arrow of the King.'

"Then the winds and storm arose, and wailed through the forest; the wild beasts and birds, the lions, tigers, and wolves, began to utter their cries, and the light of day was withheld, whilst the mountains quaked, the fountains were dried up and the flowers faded, as the thunders rolled and the earth shook. Then the blind hermits trembled for fear, and said, 'What mean these portents? Our son has long been gone to fetch us water. Can it be some poisonous creature has wounded him? Hark, how the beasts of the forest cry! Never before have we heard it so. The winds are wailing loud on every hand; the trees are tossing to and fro. Alas! there must be some calamity.'

"Then the King, in great grief and with much remorse, exclaimed, 'I indeed, thinking to shoot a deer, have pierced this hermit through with my arrow. Oh! what a crime is mine! This is the just reward I reap for lusting after flesh! Now would I gladly give my whole treasury, my wives, and all my kingdom, could I but save the life of this youth!' And then the King essayed with his hand to draw forth the arrow from Sâma's breast, but so deeply was it seated that his attempt was vain. Then the birds of the forest flew round, coming from the four quarters, screaming with fear, whilst the mountains shook, and the King trembled with fear. Then Sâma said, 'Your Majesty is not to blame; it is I who in some former life have committed wrong, which now brings its just punishment. I regret not my death on my own account, but I am moved with pity for my blind parents. Alas! they are very old, and their sight is gone! When I am gone, what can they do? Alas! they will have no one to befriend them on earth! May the spirits and heavenly guardians protect them!'

"Then the King said, 'May I undergo the torments of hell for a hundred Kalpas, but oh! may this youth survive!' and then prostrating himself before Sâma he wept from grief, and swore never to return to his kingdom, but in case of Sâma's death to abide in the mountain wilds, and tend on the aged parents of the youth; and he called on all the powers of heaven to bear witness to his oath!

"Then Sâma replied, 'If so you act, then I die contented, and your guilt will be removed.'

"Then the King, having learned from the youth where his parents

dwelt, and having been exhorted to break the news of his calamity with gentleness and consideration to them, accompanied by a few of his followers he proceeded to the spot. And then Sâma expired, while the birds, flocking together from every side, endeavoured to remove (lick) the flowing blood from his breast.

"Then the parents of Sâma, hearing the King approach through the forest, were filled with alarm, and said, 'Who! who is this! This is not our child approaching.' Then the King replied, 'I am the monarch of Kasi; hearing that you were dwelling alone in these mountain solitudes, I desired to come and offer you some sustenance.' The blind hermits then inquired if all was well with the King that he should have come thus far, and that his arrival should be accompanied by such strange portents as had just occurred. The King assured them that all was well, and then inquired how they could find any comfort in residing there alone in the mountains; to which they replied, 'We are happy, O King, in having a faithful and loving son called Sâma, who provides us with all we need. But let Your Majesty,' they said, 'sit down, and partake of the fruits we have, and Sâma, who has gone to fetch us water, will soon return.' Then the King, hearing thqse words, burst into tears and sad lamentation, and said, 'Oh, guilty man that I am; whilst shooting the wild deer of the forest I have killed your son! alas! alas! and now am I come to acquaint you therewith.' Then the parents began to tremble with anguish, as the great mountains shake and the earth is moved; whilst with their faces looking to heaven they cried, 'Our son Sâma—the most dutiful in all the world, guiltless of any crime, exemplary for every virtue—what has he done that he should thus die! Let the winds blow amain, and the trees shake, and the earth quake, and the birds scream, for our Sâma shall never more return.' Then the blind mother being overpowered with sorrow, her husband consoled her thus: 'No man living but must die! Impermanency is the universal Law!'

"Then the King related to the father all the words of Sâma, on which he replied, 'Lead us, O King! to the spot where our son is lying.' On this the King conducted them to the place where lay the dead body of their child. Then the father embracing his head, and the mother clasping his knees, leaning over his body they began with their hands to smooth his body, and to feel where the arrow had pierced him, and then looking up to heaven they cried, 'O ye spirits and

heavenly powers! ye guardians of the forest and the mountains! bear witness with us that in all the earth there was none so dutiful and so pious as this our child! Oh! let not so dear a child be taken from us, his parents, old and blind. Oh! let him live.' And then they swore that in virtue of his piety and dutiful conduct, when they withdrew the arrow he should live again!

"On this the monarch of the Trãyastrinshas Heaven—feeling his throne greatly moved—looking forth beheld these two, the blind parents of Sâma, embracing their son and invoking the heavenly powers. So also the King of the Tusita Heavens, hearing the same, in a moment both Sakra and Brahma and the four Kings descended to earth and came to the spot—and then, pouring some divine medicine into the mouth of Sâma, as they withdrew the arrow, lo! he lived again!

"At the same time the eyes of both his parents were opened, whilst the birds around tuned forth a joyous chorus, and the gentle breezes sighed, and the sun gave forth his light, and the fountains flowed again, and the flowers burst into bloom, and the scented woods gave forth their odour, and all the trees resumed their former beauty.

"Then the King rejoiced, and with unrestrained delight fell down at Sakra's feet, and afterwards at the feet of the parents and of Sâma; whilst he vowed that whatever treasures he possessed he would bestow them on the followers of religion, and ever nourish and cherish them to atone for his sin! Then Sâma said, 'Let the King return to his dominion, and ever encourage piety and virtue; let the King no longer take life in the chase, for nought but future misery awaits those who wickedly deprive others of life.' Then the King, having seen the miracles which had been wrought on Sâma and his parents, returned to his kingdom, and took upon himself the five rules of a religious person, and practised continually the ten virtues of a professed disciple. And so he was born in Heaven."

Then Buddha said, "At that time, Ananda! I was Sâma, the blind father was Suddhôdana, and the blind mother Mâya. The King of Kasi was Ananda! Sakra Raja was the present Maitreya Bodhisatwa!" And then he added, "It was because of my former piety as the child Sâma that now I have arrived at the condition of Lord of the Three Worlds."

Having heard this story, the Bodhisatwas, Bhikshus, Bhikshunis, Upasakas, and Upasakìs, filled with joy, accepted it and departed.

In conclusion, I wish once more to record my hope that the Buddhist Literature in China may be examined with that care it deserves; for I am persuaded that it will be found to contain valuable facts not to be recovered elsewhere, relating to the History of India during a period of great importance.

ACCAD AND RESEN;

OR,

THE RELATIONS BETWEEN THE LANGUAGES OF THE ACCADIANS AND THE RASENNA.

BY THE REV. ISAAC TAYLOR, M.A.

IN my "Etruscan Researches" I have attempted to explain the Etruscan records by means of the existing Altaic languages. To this attempt it has been objected, with some plausibility, that, granting the Etruscan to be an Altaic language, it must, at the most moderate estimate, have branched from the Altaic stem at least three thousand years ago, during which period the existing Finnic and Turkic languages, destitute of a literature, and spoken only by hordes of wandering savages, must have undergone dialectic changes so great as to make them useless as a basis for the interpretation of the Etruscan records.

A few years ago no answer could have been given to this objection. Now, however, the Cuneiform inscriptions have made known to us three Turanian languages of the Altaic type, whose written records date from a period not less ancient than those of the Etruscans. These three languages are the Elamite (Third Achæmenian), the Susian, and the Accadian. As might be expected, they throw immense light on the vocabulary and structure of the Etruscan, a language of equal antiquity, and belonging to the same family of speech.

Some of the chief points of agreement I will now proceed to indicate.

I.—Grammar.

In Etruscan the genitive is usually expressed by position only, without the use of any inflexion. The genitive follows its subject: e.g. *Hinthial Patrukles* 'the ghost of Patrokles.' The same construction, exactly, is used in Susian (e.g. *s'unkik Anzan* 'king of Anzan'); and also in Accadian (e.g. *é dingira* 'the house of God'). In Elamite we have also the genitive of position; but the genitive here precedes the subject, as *Kuras sakri* 'Cyrus' son.' The Basque and the Wotiak follow the same rule as the Accadian, the Susian and the Etruscan; the other Altaic languages, as a rule, agree with the Elamite.[1]

In Susian and Elamite, side by side with this genitive of position, we have also a genitive of inflexion. This is expressed by the suffix *-na*, a post-position which is used in Accadian to denote both the genitive and the ablative. I need hardly remark that the use of this post-position *-na* is one of the most universal and characteristic features in the whole of the Altaic languages.

In Etruscan this post-position *-na* is freely used; it has a genitival or possessive force, meaning 'of' or 'belonging to.' Thus from *suthi* 'a tomb,' we get *suthi-na* 'a sepulchral offering,' literally 'that which belongs to a tomb.' Gentile names are thus ordinarily constructed from an ancestral prænomen. Thus from the prænomina Vele, Tete, and Veltur, we get the Gentile names Vel-na and Velina, Teti-na, and Veltur-na.

Other Etruscan Gentile names, such as Sentina-te and Urina-te, are formed from prænomina by the addition of the post-position *-te*, which must denote 'derivation from.' It may be compared with the Accadian post-position *-ta*, which means 'from,' as well as with the Yenissei Ostiak genitive in *-da* and the Koibal locatives in *-ta* and *-da*.

Accadian post-positions seem occasionally to answer to prepositions in Etruscan. Thus the Etruscan preposition *ir* means 'from,' as in *ir Pupliana* 'from Populonia.' We may identify this preposition with the Accadian post-position *-ra*, which means 'from,' and which seems to be the same as the Elamite ablative in *-mar*, and the modern Yenisseian ablative in *-er*.

The Etruscan preposition *nak* means 'to,' as *nak Achrum* 'to

[1] Lenormant, *Et. Acc.*, vol. i. p. 175.

Acheron.' This corresponds closely with the Accadian *na-cu* 'to,' and the Magyar *nak* 'to.' [1]

The Etruscan ethnic suffix is *-ach*, as in *Rumach* 'a Roman,' *Svepmach* 'a Sabine,' *Velznach* 'a Volscian,' and *Pusach* 'a Pisan.' In Susian we find the same suffix, bearing the same signification, as *Susinak* 'a Susian.' This suffix is still commonly used in the formation of the names of Siberian tribes, such as Ostiak, Kosak, Wotiak, Koriak, Aimak, Karakalpak, Usbek, Jurak, and Kalmuk. It may possibly be connected with the Accadian *uku* 'people,' but more probably it is to be referred to the Accadian suffix *ga*, which is used to form adjectives; thus from *kal* 'strength,' comes *kal-ga* 'powerful.' Traces of this adjectival suffix may, I think, be detected in Etruscan. Thus from *suthi* 'sepulchrum,' comes *suthik* 'sepulchrale.' This would agree exactly with the Susian mode of forming adjectives, e.g. *libak* 'strong,' from a root *liba*.[2]

In Etruscan the article, or indeterminate case, is denoted by the suffix *-s*, as *Truials* 'a Trojan.' In Elamite the indefinite article is expressed by the suffix *-ra*, and the definite article by the suffix *-vas*, which Dr. Norris identifies with the suffix *-s*, which has the same force in Mordwin.

The Etruscan participial sign was *-an*. The Accadian participial sign was originally *-an*, afterwards cut down to *-a*.

In Elamite and Accadian the plural suffix is *-mes*. In Zirianian it is *-yas*, and in Wotiak it is *-yos*. Prof. Max Müller believes that the old Ugric plural was *-as*. This may be identified with *-ar*, the Etruscan plural suffix. The change of *s* to *r* is exemplified in the Turkic, Mongolic and Dravidian languages, which form the plural in *-lar*, *-nar*, and *-mar*, respectively.

The numerals in Accadian and Etruscan are very imperfectly known, but among the few which have been determined there are some curious correspondencies.

Thus in Accadian *sa* is 'four,' a numeral apparently connected with the Accadian *su* 'hand.' In Etruscan we have the same word *sa*, also meaning 'four.'

In Accadian *essa* means 'three.' The Etruscan numeral for 'three' is written in the two forms *esal* and *zal*.

[1] It answers to the Elamite *-ikki* and the Tatar *-ke*.

[2] Lenormant, *Le Magie*, p. 322.

In Etruscan *ki* is 'two,' and *kis* is 'second.' In Accadian *kas* is 'two,' and *ki* means 'with,' and Mr. Sayce thinks it may also be a sign of the dual.

The Etruscan numeral *mach* 'one,' seems to be derived from an Altaic word meaning 'finger-nail' or 'finger.' This word may be recognized in the Accadian *amas* 'a nail.' The Accadian numeral for 'one' is *it*, a word which originally denoted the 'hand'; the idea of unity being denoted by holding up the hand, as in Etruscan by holding up the finger. But in Etruscan this word *it* 'hand' becomes the source, not of the numeral 'one,' but of the numeral 'five,' which is written *thu*. The Samojed *utte* 'arm,' gives a transitional form.

II.—Mythology.

In Accadian, as well as in Elamite, the divine determinative is the prefix *An-*, which means 'high,' or 'God.' In Etruscan the same syllable *an* or *un* also forms the divine determinative, with this difference, that it is used as a suffix instead of a prefix to the names of Divine Beings. Examples are Tur-an, Thes-an, Me-an, Summ-an (Summanus), Char-un, Neth-un-s, Vulc-an and Di-ana.

The Accadian is helpful in two ways when we attempt to explain the names of the Etruscan deities. In a few cases the same god, bearing the same name, was worshipped both by Accadians and Etruscans. In a larger number of cases the Accadian affords an explanation, more or less perfect, of the names of Etruscan deities.

To go fully into these mythological correspondencies would demand far more space than I have at my disposal—a few instances of either kind must suffice.

There is an Etruscan mirror of very archaic type, on which the Sun-God and the Moon-Goddess are unmistakably portrayed under the names of Aplun and Lala. The Accadian serves to show, I think, that the name *Lala*, here given to the Moon, is derived from the likeness of a human 'face,' which is so conspicuously seen in the full moon. In Accadian the word *alala* means 'image,' 'statue,' 'sculpture,' and is also used as an appellation of the Sun. Curiously enough, this word, which means 'moon' in Etruscan, and 'image' or 'statue' in Accadian, is used in Mongolian to denote both these ideas. An initial *l* in Etruscan and in Accadian usually corresponds

to a Mongolian *s*, and a medial *l* to *r*. Therefore the Etruscan *lala* would appear in Mongol as *sara*. Now in Mongol *sara* means the 'moon,' and *sharai* means 'a face.' Thus the Mongol curiously dovetails together the Accadian and the Etruscan words.

The 'Sun' is also depicted on this mirror under the name *Aplun*. The name constantly recurs on Etruscan mirrors in the forms Apul, Apulu, and Aplu. It may, I think, be confidently affirmed that no satisfactory Aryan etymology of the name Apollo has as yet been propounded. When, however, we turn to the Accadian, we find a satisfactory explanation of the name from the word *pil* or *bil*, which means to 'burn' or 'scorch.' The name of the 'year,' which is *pal* in Accadian, and *beul-gi* in Elamite, is probably a related word.

The Accadian deity *Moul-ge* 'the Earth-God,' or 'the Lord of Subterranean Fire,' reappears in the Turanian worships of Italy as Vulcan. The final *an* in Vulcan is, of course, only the usual divine determinative.

Moul-ge forms one of the Accadian triad of great gods, Anna, Êa, and Moul-ge, who preside respectively over the air, the water, and the earth. M. Lenormant has identified this Accadian triad with the triad of the Finnic Kalevala, where the same offices are respectively discharged by Jumala (Ukko), Wäinämöinen, and Il-marinnen. In the Kalevala Il-marinnen is the heavenly smith who forges the celestial canopy. His symbol is the hammer. I believe that the first syllable of the name *Il-* is ultimately identical with the Accadian *Moul*, and the *Vul* of Vulcan.

Êa (Noah), the Accadian god who presides over the waters, is identical with the Finnic Wäinämöinen, and the Italic Janus or Eanus (Oannes of Berosus), whose ancient symbol is a ship.

Anna, the first god of the Accadian triad, also called *si-anna* 'the Spirit of Heaven,' is, I think, the same as *ti-en* or *thi-an* 'the Spirit of Heaven,' whose name and worship the Chinese borrowed from the Mongols. Among the Etruscans he reappears as *Ti-na*[1] 'the supreme heaven,' answering to Jupiter, and also in the female form as *Di-ana;* and we may identify him with Ukko, Jumala, or Vanha taivahinen, the heaven god of the Finnic triad.

[1] *cf.* the name Dingir or Dimir, the supreme heaven god of the Accadians, and the Tatar *Dengir* 'God.' The suffix *ir* being only a formative, the root is *Ding* or *Dim*. *Dim* or *Dimma* means 'spirit' in Accadian.

Several other Etruscan gods may be identified with Accadian deities. Thus Hesychius tells us that the word *Æsar* meant 'God' in Etruscan. The supreme national god of the Assyrians was *Assur*. The primitive form of this name was *Ausar*, which seems to have been of Babylonian origin.[1]

The Etruscan Neth-uns, or Nept-une, seems to have been originally a solar rather than a marine deity. Now in Accadian the word *nap* means 'light,' and *nab* means 'divinity,' while in Elamite *annap* means 'God.'

The legend of the capture of Veii, and of the transference of the Juno of Veii to Rome, indicates that the name and worship of the non-Aryan Juno were borrowed by the Romans from the Etruscans. Juno was the goddess of the 'day.' I have elsewhere shown that the word pervades every branch of the Altaic stem, from the Samojed *jum* 'heaven,' and the Turkic *kun* 'day,' to the distant Basque *egun* 'day.' In the Accadian *ugun*, which means the 'day,' we have doubtless the most ancient form of this wide-spread word.

The Etruscan *lemures* (of which the singular form would probably be *lem*) may be compared with the genii, good or evil, which were called *lamma* by the Accadians.

A female deity called *Lasa* appears on several Etruscan mirrors. The name seems to be the same as that of the Chaldean goddess *Laz*, and the *Los* of the Samojeds.

Another female deity depicted on the Etruscan mirrors is called *Munthuch*. From her attributes, Gerhard pronounces her to be a Charis, giver of grace and favour. The Accadian explains this word completely. The first syllable *mun* means 'beneficent,' 'benefit,' in Accadian, and may be compared with the word *manus* 'good,' which occurs in the Salian hymn. The Accadian word *tuc* means 'to possess,' and is apparently related to the Etruscan *teke* 'dedit.' The name *Munthuch* would therefore denote the possessor or giver of good fortune.

The Eastern deity known as *Anaitis* was the Magian Venus, who was borrowed by the Assyrians under the name *Anâhita*. On an Etruscan mirror Venus is styled *Tiv-anaiti*. The first syllable is apparently the Latin Diva in an Etruscan garb, and it may be

[1] Lenormant, *La Magie*, p. 274.

questioned whether the rest of the name belongs to the genuine staple of the Etruscan language and mythology, as the mirror is obviously of very late date.

The Accadian words *num* 'high,' *enum* 'heaven,' and *nim* 'to be elevated,' have been connected with the modern Wogul *numen* 'lofty,' and the Ostiak *noman* 'heaven.' This word may be traced in the Etruscan *noven-siles* 'the heavenly lighteners,' a collective name for the gods who possessed the power of the thunderbolt. It is not improbable that the Latin *numen*, as a designation of deity, is of Etruscan rather than of Aryan origin, in which case we should refer it to the same root.

III.—Vocabulary.

Not only do we find these correspondencies in the names of Divine Beings, but a very large proportion of the small number of Etruscan words whose meaning is certain or probable are identical in sound and sense with words in the very limited Accadian vocabularies which are accessible to the student. When M. Lenormant's promised Accadian Dictionary appears, it will doubtless be possible largely to extend the list.

The primeval words which designate the family relationships survive the mutations of languages and nations with a greater persistency than any other class of words, and are therefore of the utmost importance as evidences of ethnic and philologic affinities.

Two of these words, which in the Etruscan epitaphs are applied to children, are *sek* and *etera*. The first means 'daughter,' the second means 'boy,' 'young son,' or simply 'young.' The Etruscan *sek* 'daughter,' may be confidently identified with the Susian *sak* 'son.' Moreover, in Elamite a 'son' is *sak-ri*, where the syllable *ri* is only the common formative. The Elamite *sacho-hut* means 'we are descended,' and shows that the Elamite root *sacho* denoted filial descent.

The Etruscan *etera* 'young,' 'a young son,' may also be identified with the Elamite *tar* 'a son.' The primitive meaning is seen in the Accadian *tura* and *tur*, which mean 'small,' 'little,' and are also, like the Etruscan *etera*, used in the general sense of 'son' or 'child,' while *tur-us* also means 'son,' literally 'child-male.' In the modern Altaic languages the word survives in both senses. We have the

Mordwin *tsür* 'a son,' and the Tscheremis *idyr* 'a girl,' while 'young' is *edder* in Yakut, and *ẹdör* in Tungus.

The Etruscan suffix *-isa*, which means 'lady' or 'dame,' and which is universally applied to wives and mothers in the Etruscan mortuary records, may be identified with the Accadian word *isse*, which means 'prince.' This word, as an honourable appellation, applied either to men or women, and meaning either 'lord' or 'lady,' prevails among the whole of the modern Altaic nations.[1]

The well-known Etruscan word *lar* 'a lord,' corresponds phonetically, as I have elsewhere shown, to the Tatar *Tzar* 'a prince.' We also find the word in Accadian, where *sar* means 'king.' It appears in the name of Sar-gina 'rex primus,' the earliest monarch of Accadian legend. Hence also comes the Assyrian *sarru* 'king.'

In Etruscan *ma* meant 'land.' In Accadian the same word precisely *ma* meant 'land,' or 'country.' In Esthonian *ma* also means 'land,' and the word is found in most of the Altaic languages.

In Etruscan *kul-mu* denotes the 'spirit of the grave.' I have elsewhere identified this name with the Finnic *kal-ma*, which in the Kalevala is used to mean the 'grave,' and also the 'ruler of the grave.' The Finnic words *kuol* 'to die,' and *ma* 'earth,' show that *kal-ma* is etymologically the land of the dead. The Accadian possesses both elements of the Etruscan and Finnic name, *ma* meaning, as we have seen, 'land,' and *kul* meaning 'to destroy.'

We are told by Festus that the word *culina* originally denoted, not any kitchen, but the kitchen which was attached to the tomb for the purpose of cooking the funeral feast. As Roman funeral rites were mostly derived from the Etruscans, we may suspect this to have been an Etruscan loan-word. I have already shown that the common Etruscan possessive suffix *-na* meant 'belonging to.' *Culi-na* would therefore mean 'mortuary,' 'belonging to the dead.'

There are other Etruscan words in which this suffix appears. *Suth-ina* has been already noted. We have also *ka-na* 'a portrait,' or 'effigy.' In Accadian *ka* means the 'mouth.' The plural *ka-ka* means the 'face.' From *ka* 'mouth,' by means of the post-position *ba* 'side,' or 'part,' we get the Accadian *ka-ba* 'the side of the

[1] It may, I think, be the source of the final *s* in certain Etruscan names of deities, such as Nethuns, Sethlans, etc.

mouth,' 'the cheek,' identical with the Tatar *ka-pa* 'head.' By a change in the post-position, we get the Etruscan *ka-na* 'an effigy,' a word which would mean 'that which belongs to the mouth,' *i.e.* 'the face.'

According to Hesychius, the Etruscan word *dru-na* meant 'sovereignty,' 'government.' I have not succeeded in tracing the word in the Altaic languages; but in Accadian *tar* means 'to judge,' and in Elamite *tar-tu* means 'retribution,' 'justice.' Since the suffix *-na* means 'belonging to,' *dru-na* in Etruscan would be that which appertains to judgment or justice, *i.e.* ἀρχή, as Hesychius explains it.[1]

One of the half-dozen words of the speech of the ancient Huns which have been preserved by the Chinese historians is *teulo*, which denoted a 'tumulus' or 'sepulchral mound.' In Accadian a 'mound' is *tul*, a word which was borrowed by the Semites. In Etruscan the plural form *tul-ar* (stem *tul*) means 'tombs.'

In the Etruscan mortuary inscriptions we several times meet with the word *am-ke*, meaning 'he expired,' 'he breathed his last.' The root of this word is *am*, which must mean 'breath.' We may refer it to the Accadian *im* 'breath,' 'wind,' and the Mongol *am-en* 'life,' 'breath.' The Etruscan *antæ* 'winds,' and *andas* 'Boreas,' are probably from the same root. *Untar* was the name of the ancient Finnish God of the Winds.

In the Etruscan inscriptions of dedications we find the verb *tenine*, which must mean 'he offered,' or 'he deposited.' The root is *ten*. In Elamite *dun-is* (root *dun*) means 'he gave.'

The Etruscan verb *teke* meant 'he gave.' This may be compared with the Accadian *tuc* 'to have,' or 'possess.'

The Etruscan *theke* is equivalent to 'fecit,' and is related to the Finnic *teka* 'to make.' In Elamite *zik* means 'to make.' The Etruscan *zek* is doubtless a related word.

The Etruscan *kevelthu* 'he burned,' may be compared with the Accadian *gibil* 'to burn.'

In Etruscan *kahati* is 'violent,' and in Accadian *katti* means 'to seize,'[2] and *gig* means 'to be violent.' In Susian *gik* is 'powerful.'

The Accadian *ên* 'incantation,' is doubtless the same word as the

[1] The Etruscan regal name Tar-quin may be thus explained as the Tar-khan, the "Judging Prince."

[2] *cf.* the Ostiak *kat-tem* 'to seize,' and the Tatar *katti* 'violent.'

Buriat *em* or *im* 'a remedy' or 'medicine.' Hence we may explain the word *ean*, which is engraved on an Etruscan amulet.

Again, on an Etruscan drinking vessel the word *an-sal* is written. Since *sal* in Etruscan seems to have meant a 'vessel' or 'cup,'[1] we may translate *an-sal* by Salutis Poculum, which is a well-known inscription on ancient drinking vessels.

In Elamite *as* means a 'chant' or 'hymn.' In Accadian the same word *as* means an 'imprecation' or 'enchantment.' These words may serve to explain the inscriptions *isi* and *asu*, which appear respectively on an Etruscan amulet, and on an Etruscan amphora.

In Etruscan *kehen* and *ken* mean 'this.' In Accadian *gan* means 'this.'

The Etruscan suffix *enna* meant 'men.' In Accadian a 'man' is *un*.

The sheep sacrificed at the ides was called *id-ul-is* (= ide-sheep). Hence we may infer that *ul* meant a 'sheep' in Etruscan. In Accadian the word for sheep is *lu*.

In Etruscan it would seem that *atr* meant 'day.' Taking the *r* as the common formative, the root would be *at*. In Accadian a 'day' is *ud*.

Local names are among the most permanent records of ancient speech. If the names of the Etruscan cities could not be explained from Accadian sources, it might be doubted, in spite of other evidence, whether the Etruscan and Accadian languages were really cognate; but in this department of the subject the evidences of linguistic affinity are conspicuous.

The most superficial observer cannot fail to be struck with one characteristic feature of Etruscan city names. A very large proportion of them begin with the prefix *Vel-* or *Vol-*, which must denote 'town' or 'dwelling.' We have, for example, the cities of Velathri, Volci, Velsuna, Velsina, Voltumnæ, Velimnas, and Vulturnum. This prefix may be referred with confidence to the Accadian *val* or *mal*, which means 'to dwell' or 'inhabit.'

In Elamite we have also *ir-vael* and *ir-mali*, meaning 'a dwelling,' 'a place of habitation.' This is no doubt the same word as the Ostiak *val* 'to dwell,' the Magyar *falu* 'a town,' and the old Mongol *balu*

[1] *cf.* Buriat *suol* 'a vessel.'

'a city,' which we find in Marco Polo's *Kan-balu* 'the city of the Khan.'

We also find this root *val* in Romanized Etruscan names. The earliest site of habitation at Rome was the *Palatine*. This was the original Etruscan fortress, and formed the germ of the Roman city. With the name of the Palatine we may connect the Pal-ilia, which was the name given to the Festival celebrated at Rome on April 21st, the day assigned by tradition as the anniversary of the founding of Rome. Nor is it impossible that the name of the Palladium, the tutelary image round which so many legends cluster, may be explained from the same source.

Another root very commonly found in the names of Etruscan cities is *Cor-* or *Cur-*. We have Cære, Cora, Cures, Coreoli, Cortona, and Corythus. These towns seem to have been hill fortresses rather than dwellings on the plain. Those who have once seen it can hardly forget the commanding site on which Cortona is perched. Cures, we know, was built high among the mountains, and Virgil speaks of the ancient rock on which Cære was built—saxo fundata vetusto.

The root *kar* or *kur* seems to correspond in meaning to the British *dun*, which is applied to hill fortresses. The Accadian gives us this precise sense, *kur* meaning 'a mountain,' and the differentiated forms *kir* and *kar* designating 'a fortress' or 'town.' In Elamite, also, *kuras* or *karas* means 'a mountain.' We may connect the word with the Wotiak and Zyrianian *kar* 'a town,' as well as with the Wotiak *gures* and the Wogul *keras*, which mean 'lofty,' 'high.'

The suffix in the name of the Etruscan city of Cap-ua may be compared with the Susian *ua* 'a house,' which is the same word as the Accadian *éa* 'a house.'

The Elamite *danas* 'people,' may perhaps be discovered in the word *Volcen-tani*, the name given to the inhabitants of the town of Volci.

The Basque *ura* 'water,' is from a wide-spread Turanian root, which we may trace to the Accadian *aria* 'water.' Hence is derived the Accadian *aria-da* 'a river.' The change of the post-position (*na* 'of,' instead of *da* 'from') gives us the modern Tatar *ar-na* 'a channel for irrigation,' 'an old river bed.' Hence we may explain the name of the great Etruscan river, the Arno.

A considerable number of Latin words appear to have no affinities in any of the Aryan languages. We may suppose, with great pro-

bability, that these isolated words were borrowed from the Etruscan. Their affinities will therefore be with the Turanian languages, and their primitive forms will have to be sought in the Accadian tablets. The very word 'tablet' is one of these. In Accadian the clay tablets which were used for writing were called *dib*, *duppa*, or *dibbu*. In Elamite a tablet is *dipi*. In Etruscan inscriptions we have the words *tip-anu* and *zip-na*, which designate 'engraved mirrors,' and the Latin word *tab-ula* is possibly of Etruscan origin.

The Etruscans were the teachers of the Romans in the art of building, more especially in the art of building cyclopean walls, as is shown by those huge substructures of the Palatine which have been recently unearthed. Hence we may believe that Latin words connected with building may have been derived from the Etruscan language. It is especially noteworthy that many words of this class have no satisfactory Aryan etymology.

Thus neither Fick nor Curtius have any Aryan etymology to propound for the word *turris*, while it is easily explained by means of the Accadian *dur* 'a fortress,' and *id-dur* 'a dwelling.' This root may probably be at the bottom of the names by which the Etruscans were known to surrounding nations—Tyrrhenoi and Tursci.

In like manner, the Latin *mœnia* and *murus* may have been Etruscan loan-words connected with the Accadian words *mun* and *mur*, which both mean 'brick,' and we may compare the word *casa* with the Elamite *kusi* 'to build.'

Again, we know that the Roman chariot races were introduced from Etruria. Chariots and horses are depicted on some of the earliest Etruscan monuments. The Latin words *currus* and *curro* have no clear connexion with any Aryan roots, while they curiously resemble the Accadian *kurra*, and the Elamite *karra*, both of which mean a 'horse.'[1]

Again, there can be no doubt that the Romans derived their knowledge of metallurgic art from the Etruscans, more especially the art of working in copper and bronze. It is therefore not improbable that the Latin *cuprium* 'copper,' may be an Etruscan loan-word. If so, we might refer it to the Accadian *kupar* 'silver.' Such a change of meaning in the names of metals is not uncommon. Thus the

[1] *cf.* the Finnic words *karo* 'a sheep,' *kaura* 'a cow,' and *karu* 'a bear.' The root meaning seems to be 'the hairy one.'

Accadian *urud* 'copper,' is undoubtedly the source of the Finnic *rauta* 'iron,'[1] while the Sanskrit *ayas* 'iron,' is the same word as the Latin *æs* 'bronze.'

In like manner the Latin *pilum* may be connected with the Accadian *pal* 'a sword,' a word which reappears in the Magyar *pallos*.

Burrus, *burra*, and *buris*, the root-meaning of which was 'nose,' must have been loan-words from the Etruscan, as we gather from Hesychius. They may be referred to the Accadian *bur* 'head,' *bar* 'top,' and *barra* 'high.' In several Turkic languages we have *burun* 'a nose.'

Lastly, I would suggest the possibility of a connexion between the Latin *ac*, a word whose Aryan affinities are by no means clear, and the Etruscan enclitic *-c*, which means 'and.' With these conjunctions we may compare the Tatar enclitic *-ok* 'and,' and the word *aak*, which means 'and' both in Elamite and Susian.

In several remarkable ethnic characteristics the Accadians resembled the Etruscans. The custom by which the Etruscans differed most conspicuously from the surrounding Aryan nations was the practice of tracing descent, not through the father, but through the mother, and of paying to her superior honour. A fragment of the Accadian laws has come down to us, by which it appears that the mother was held in higher honour than the father, and a much heavier penalty was exacted for breach of filial duty to her than to him.

On the Etruscan monuments the worship of serpent gods and of catachthonian deities is so manifestly depicted as to strike the most superficial observer. The same worships prevailed also among the Turanian peoples of the Euphrates. The Accadians made the serpent one of the attributes of the god Êa; and the Proto-Medes, a Turanian race, worshipped one of their chief gods under the figure of a serpent.

The practice of magic conspicuously distinguished both the Accadians and the Etruscans from surrounding nations. This has been brought out so fully by M. Lenormant, that I need not enlarge upon it. One point is especially curious, and can hardly be accidental. Among the Accadian Magi the power of the magician was supposed to reside in his staff. In the Kalevala the same powers belong to the magician's wand which the Etruscan augurs attached to the lituus.

[1] *cf.* Lapp *rude* 'iron,' Sclavonic *ruda* 'iron.'

Lastly, according to Baron d'Eckstein and M. Lenormant, a chief characteristic of the ancient Turanian races of Central Asia was their proficiency in the arts of metallurgy. They supplied all the surrounding nations of the East with bronze, copper, and iron. The Etruscans, in like manner, were the metal-workers of ancient Europe. The Etruscan iron foundries in Elba, as we are informed by Diodorus, at one time supplied almost the whole civilized world; and the huge heaps of scoriæ which the Etruscans have left at Campiglia and Gherardesca testify eloquently to the enormous development attained by their manufactures of bronze and copper.

The hypothesis that the mysterious Etruscan people were an Altaic race from Central Asia, closely akin to the Accadians, the Elamites, the Susians, and the Proto-Medes, seems to me to be in harmony with all the available evidence—philological, mythological, and ethnological; while there is no argument of any weight, so far as I am aware, that has been brought forward to disprove it. Till some rival hypothesis equally probable is produced, I think I may at least claim the provisional acceptance of my theory as a working hypothesis in the attempt to decipher the Etruscan records.

ROYAL ASIATIC SOCIETY BOMBAY BRANCH
JACKSON
MEMORIAL
COLLECTION.

THE ARYAN SECTION.

ADDRESS

BY

PROFESSOR MAX MÜLLER, PRESIDENT.

No one likes to be asked, what business he has to exist, and yet, whatever we do, whether singly or in concert with others, the first question which the world never fails to address to us, is *Die cur hic?* Why are you here? or to put it into French, What is your *raison d'être?* We have had to submit to this examination even before we existed, and many a time have I been asked the question, both by friend and foe, What is the good of an International Congress of Orientalists?

I shall endeavour, as shortly as possible, to answer that question, and show that our Congress is not a mere fortuitous congeries of barren atoms or molecules, but that we are at least Leibnizian monads, each with his own self, and force, and will, and each determined, within the limits of some pre-established harmony, to help in working out some common purpose, and to achieve some real and lasting good.

It is generally thought that the chief object of a scientific Congress is social, and I am not one of those who are incapable of appreciating the delights and benefits of social intercourse with hard-working and honest-thinking men. Much as I detest what is commonly called society, I willingly give up glaciers and waterfalls, cathedrals and picture galleries, for one half hour of real society, of free, frank, fresh, and friendly intercourse, face to face, and mind to mind, with

a great, and noble, and loving soul, such as was Bunsen; with a man intrepid in his thoughts, his words, and his deeds, such as was John Stuart Mill; or with a scholar who, whether he had been quarrying heavy blocks, or chiselling the most brittle filigree work, poured out all his treasures before you with the pride and pleasure of a child, such as was Eugène Burnouf. A Congress therefore, and particularly an International Congress, would certainly seem to answer some worthy purpose, were it only by bringing together fellow-workers of all countries and ages, by changing what were to us merely great names into pleasant companions, and by satisfying that very right and rational curiosity which we all feel, after having read a really good book, of seeing what the man looks like who could achieve such triumphs.

All this is perfectly true; yet, however pleasant to ourselves this social intercourse may appear, in the eyes of the world at large it will hardly be considered a sufficient excuse for our existence. In order therefore to satisfy that outer world, that we are really doing something, we point of course to the papers which are read at our public meetings, and to the discussions which they elicit. Much as I value that feature also in a scientific congress, I confess I doubt, and I know that many share that doubt, whether the same result might not be obtained with much less trouble. A paper that contains something really new and valuable, the result, it may be, of years of toil and thought, requires to be read with care in a quiet corner of our own study, before the expression of our assent or dissent can be of any weight or value. There is too much hollow praise, and occasionally too much wrangling and ill-natured abuse at our scientific tournaments, and the world at large, which is never without a tinge of malice and a vein of quiet humour, has frequently expressed its concern at the waste of "oil and vinegar" which is occasioned by the frequent meetings of our British and Foreign Associations.

What then is the real use of a Congress, such as that which has brought us together this week from all parts of the world? What is the real excuse for our existence? Why are we here, and not in our workshops?

It seems to me that the real and permanent use of these scientific gatherings is twofold.

(1) They enable us to take stock, to compare notes, to see where we are, and to find out where we ought to be going.

(2) They give us an opportunity, from time to time, to tell the world where we are, what we have been doing for the world, and what, in return, we expect the world to do for us.

The danger of all scientific work at present, not only among Oriental scholars, but, as far as I can see, everywhere, is the tendency to extreme specialisation. Our age shows in that respect a decided reaction against the spirit of a former age, which those with grey heads among us can still remember, an age represented in Germany by such names as Humboldt, Ritter, Böckh, Johannes Müller, Bopp, Bunsen, and others; men who look to us like giants, carrying a weight of knowledge far too heavy for the shoulders of such mortals as now be; aye, men who *were* giants, but whose chief strength consisted in this, that they were never entirely absorbed or bewildered by special researches, but kept their eye steadily on the highest objects of all human knowledge; who could trace the vast outlines of the kosmos of nature or the kosmos of the mind with an unwavering hand, and to whose maps and guide books we must still recur, whenever we are in danger of losing our way in the mazes of minute research. At the present moment such works as Humboldt's Kosmos, or Bopp's Comparative Grammar, or Bunsen's Christianity and Mankind, would be impossible. No one would dare to write them, for fear of not knowing the exact depth at which the *Protogenes Haeckelii* has lately been discovered or the lengthening of a vowel in the *Samhitapâtha* of the *Rig-veda*. It is quite right that this should be so, at least, for a time; but all rivers, all brooks, all rills, are meant to flow into the ocean, and all special knowledge, to keep it from stagnation, must have an outlet into the general knowledge of the world. Knowledge for its own sake, as it is sometimes called, is the most dangerous idol that a student can worship. We despise the miser who amasses money for the sake of money, but still more contemptible is the intellectual miser who hoards up knowledge instead of spending it, though, with regard to most of our knowledge, we may be well assured and satisfied that, as we brought nothing into the world, so we may carry nothing out.

Against this danger of mistaking the means for the end, of

making bricks without making mortar, of working for ourselves instead of working for others, meetings such as our own, bringing together so large a number of the first Oriental scholars of Europe, seem to me a most excellent safe-guard. They draw us out of our shell, away from our common routine, away from that small orbit of thought in which each of us moves day after day, and make us realise more fully, that there are other stars moving all around us in our little universe, that we all belong to one celestial system, or to one terrestrial commonwealth, and that, if we want to see real progress made in that work with which we are more specially entrusted, the re-conquest of the Eastern world, we must work with one another, for one another, like members of one body, like soldiers of one army, guided by common principles, striving after common purposes, and sustained by common sympathies. Oriental literature is of such enormous dimensions that our small army of scholars can occupy certain prominent positions only; but those points, like the stations of a trigonometrical survey, ought to be carefully chosen, so as to be able to work in harmony together. I hope that in that respect our Congress may prove of special benefit. We shall hear, each of us, from others, what they wish us to do. "Why don't you finish this?" "Why don't you publish that?" are questions which we have already heard asked by many of our friends. We shall be able to avoid what happens so often, that two men collect materials for exactly the same work, and we may possibly hear of some combined effort to carry out great works, which can only be carried out *viribus unitis*, and of which I may at least mention one, a translation of the *Sacred Books of Mankind*. Important progress has already been made for setting on foot this great undertaking, an undertaking which I think the world has a right to demand from Oriental scholars, but which can only be carried out by joint action. This Congress has helped us to lay the foundation-stone, and I trust that at our next Congress we shall be able to produce some tangible results.

I now come to the second point. A Congress enables us to tell the world what we have been doing. This, it seems to me, is particularly needful with regard to Oriental studies which, with the exception of Hebrew, still stand outside the pale of our schools and Universities, and are cultivated by the very smallest number of

students. And yet, I make bold to say, that during the last hundred, and still more during the last fifty years, Oriental studies have contributed more than any other branch of scientific research to change, to purify, to clear, and intensify the intellectual atmosphere of Europe, and to widen our horizon in all that pertains to the Science of Man, in history, philology, theology, and philosophy. We have not only conquered and annexed new worlds to the ancient empire of learning, but we have leavened the old world with ideas that are already fermenting even in the daily bread of our schools and Universities. Most of those here present know that I am not exaggerating; but as the world is sceptical while listening to orations *pro domo*, I shall attempt to make good my assertions.

At first, the study of Oriental literature was a matter of curiosity only, and it is so still to a great extent, particularly in England. Sir William Jones, whose name is the only one among Oriental scholars that has ever obtained a real popularity in England, represents most worthily that phase of Oriental studies. Read only the two volumes of his Life, and they will certainly leave on your mind the distinct impression that Sir William Jones was not only a man of extensive learning and refined taste, but undoubtedly a very great man—one in a million. He was a good classical scholar of the old school, a well-read historian, a thoughtful lawyer, a clear-headed politician, and a true gentleman, in the old sense of the word. He moved in the best, I mean the most cultivated society, the great writers and thinkers of the day listened to him with respect, and say what you like, we still live by his grace, we still draw on that stock of general interest which he excited in the English mind for Eastern subjects.

Yet the interest which Sir William Jones took in Oriental literature was purely aesthetic. He chose what was beautiful in Persian and translated it, as he would translate an ode of Horace. He was charmed with Kâlidâsa's play of Sakuntala—and who is not?—and he left us his classical reproduction of one of the finest of Eastern gems. Being a judge in India, he thought it his duty to acquaint himself with the native law-books in their original language, and he gave us his masterly translation of the Laws of Manu. Sir William Jones was fully aware of the startling similarity between

Sanskrit, Latin, and Greek. More than a hundred years ago, in a letter written to Prince Adam Czartoryski, in the year 1770, he says: "Many learned investigators of antiquity are fully persuaded that a very old and almost primeval language was in use among the northern nations, from which not only the Celtic dialect, but even Greek and Latin are derived; in fact we find *πατήρ* and *μήτηρ* in Persian, nor is *θυγάτηρ* so far removed from *dockter*, or even *ὄνομα* and *nomen* from Persian *nâm*, as to make it ridiculous to suppose that they sprang from the same root. We must confess," he adds, "that these researches are very obscure and uncertain, and, you will allow, not so agreeable as an ode of Hafez, or an elegy of Amr'alkeis." In a letter, dated 1787, he says: "You will be surprised at the resemblance between Sanskrit and both Greek and Latin."

Colebrooke also, the great successor of Sir William Jones, was fully aware of the relationship between Sanskrit, Greek, Latin, German, and even Slavonic. I possess some curious MS. notes of his, of the year 1801 or 1802, containing long lists of words, expressive of the most essential ideas of primitive life, and which he proved to be identical in Sanskrit, Greek, Latin, German, and Slavonic.[1]

Yet neither Colebrooke nor Sir William Jones perceived the full import of these facts. Sir William Jones died young; Colebrooke's energies, marvellous as they were, were partly absorbed by official work, so that it was left to German and French scholars to bring to light the full wealth of the mine which those great English scholars had been the first to open. We know now that in language, and in all that is implied by language, India and Europe are one; but to prove this, against the incredulity of all the greatest scholars of the day, was no easy matter. It could be done effectually in one way only, viz. by giving to Oriental studies a strictly scientific character, by requiring from Oriental students not only the devotion of an *amateur*, but the same thoroughness, minuteness, and critical accuracy which were long considered the exclusive property of Greek and Latin scholars. I could not think of giving here a history of the work done during the last

[1] These lists of common Aryan words were published in the *Academy*, October 10th, 1874, and in the fourth volume of my *Chips*, p. 418.

fifty years. It has been admirably described in Benfey's 'History of the Science of Language.'[1] Even if I attempted to give merely the names of those who have been most distinguished by really original discoveries — the names of Bopp, Pott, Grimm, Burnouf, Rawlinson, Miklosich, Benfey, Kuhn, Zeuss, Whitley Stokes—I am afraid my list would be considered very incomplete.

But let us look at what has been achieved by these men, and many others who followed their banners! The East, formerly a land of dreams, of fables, and fairies, has become to us a land of unmistakeable reality; the curtain between the West and the East has been lifted, and our old forgotten home stands before us again in bright colours and definite outlines. Two worlds, separated for thousands of years, have been reunited as by a magical spell, and we feel rich in a past that may well be the pride of our noble Aryan family. We say no longer vaguely and poetically *Ex Oriente Lux*, but we know that all the most vital elements of our knowledge and civilisation,—our languages, our alphabets, our figures, our weights and measures, our art, our religion, our traditions, our very nursery stories, came to us from the East; and we must confess that but for the rays of Eastern light, whether Aryan, or Semitic, or Hamitic, that called forth the hidden germs of the dark and dreary West, Europe, now the very light of the world, might have remained for ever a barren and forgotten promontory of the primeval Asiatic continent. We live indeed in a new world, the barrier between the West and the East, that seemed insurmountable, has vanished. The East is ours, we are its heirs, and claim by right our share in its inheritance.

We know what it was for the Northern nations, the old barbarians of Europe, to be brought into spiritual contact with Rome and Greece, and to learn that beyond the small, poor world in which they had moved, there was an older, richer, brighter world, the ancient world of Rome and Athens, with its arts and laws, its poetry and philosophy, all of which they might call their own and make their own by claiming the heritage of the past. We know how, from that time, the Classical and Teutonic spirits mingled together and formed that stream of modern thought on whose

[1] Geschichte der Sprachwissenschaft und Orientalischen Philologie in Deutschland von Theodor Benfey. München, 1869.

shores we ourselves live and move. A new stream is now being brought into the same bed, the stream of Oriental thought, and already the colours of the old stream show very clearly the influence of that new tributary. Look at any of the important works published during the last twenty years, not only on language, but on literature, mythology, law, religion, and philosophy, and you will see on every page the working of a new spirit. I do not say that the East can ever teach us new things, but it can place before us old things, and leave us to draw from them lessons more strange and startling than anything dreamt of in our philosophy.

Before all, a study of the East has taught us the same lesson which the Northern nations once learnt in Rome and Athens, that there are other worlds beside our own, that there are other religions, other mythologies, other laws, and that the history of philosophy from Thales to Hegel is not the whole history of human thought. In all these subjects the East has supplied us with parallels, and with all that is implied in parallels, viz. the possibility of comparing, measuring, and understanding. The *comparative spirit* is the truly scientific spirit of our age, nay of all ages. An empirical acquaintance with single facts does not constitute knowledge in the true sense of the word. All human knowledge begins with the Two or the Dyad, the comprehension of two single things as one. If we may still quote Aristotle, we may boldly say that "there is no science of that which is unique." A single event may be purely accidental, it comes and goes, it is inexplicable, it does not call for an explanation. But as soon as the same fact is repeated, the work of comparison begins, and the first step is made in that wonderful process which we call generalisation, and which is at the root of all intellectual knowledge and of all intellectual language. This primitive process of comparison is repeated again and again, and when we now give the title of *Comparative* to the highest kind of knowledge in every branch of science, we have only replaced the old word *intelligent* (i.e. interligent) or inter-twining, by a new and more expressive term, *comparative*. I shall say nothing about the complete revolution of the study of languages by means of the comparative method, for here I can appeal to such names as Mommsen and Curtius, to show that the best among classical scholars are

themselves the most ready to acknowledge the importance of the results obtained by the intertwining of Eastern and Western philology.

But take mythology. As long as we had only the mythology of the classical nations to deal with, we looked upon it simply as strange, anomalous, and irrational. When, however, the same strange stories, the same hallucinations, turned up in the most ancient mythology of India, when not only the character and achievements, but the very names of some of the gods and heroes were found to be the same, then every thoughtful observer saw that there must be a system in that ancient madness, that there must be some order in that strange mob of gods and heroes, and that it must be the task of comparative mythology to find out, what reason there is in all that mass of unreason.

The same comparative method has been applied to the study of religion also. All religions are Oriental, and with the exception of the Christian, their sacred books are all written in Oriental languages. The materials therefore, for a comparative study of the religious systems of the world had all to be supplied by Oriental scholars. But far more important than those materials, is the *spirit* in which they have been treated. The sacred books of the principal religions of mankind had to be placed side by side with perfect impartiality, in order to discern the points which they share in common as well as those that are peculiar to each. The results already obtained by this simple juxta-position are full of important lessons, and the fact that the truths on which all religions agree far exceed those on which they differ, has hardly been sufficiently appreciated. I feel convinced, however, that the time will come when those who at present profess to be most disquieted by our studies, will be the most grateful for our support; for having shown by evidence which cannot be controverted, that all religions spring from the same sacred soil, the human heart; that all are quickened by the same divine spirit, the still small voice; and that, though the outward forms of religion may change, may wither and decay, yet, as long as man is what he is and what he has been, he will postulate again and again the Infinite as the very condition of the Finite, he will yearn for something which the world cannot give; he will feel his weakness and dependence, and in that weakness

and dependence discover the deepest sources of his hope, and trust, and strength.

A patient study of the sacred scriptures of the world is what is wanted at present more than anything else, in order to clear our own ideas of the origin, the nature, the true purposes of religion. There can be no science of one religion, but there can be a science of many. We have learnt already one lesson, that behind the helpless expressions which language has devised, whether in the East or in the West, for uttering the unutterable, be it *Dyaushpitâ* or *Ahuramazda*, be it *Jehovah* or *Allah*, be it the All or the Nothing, be it the First Cause or Our Father in heaven, there is the same intention, the same striving, the same stammering, the same faith. Other lessons will follow, till in the end we shall be able to restore that ancient bond which unites not only the East with the West, but all the members of the human family, and may learn to understand what a Persian poet meant when he wrote many centuries ago (I quote from Mr. Conway's 'Sacred Anthology,') "Diversity of worship has divided the human race into seventy-two nations. From among all their dogmas I have selected one—the Love of God."

Nor is this comparative spirit restricted to the treatment of language, mythology, and religion. While hitherto we knew the origin and spreading of most of the ancient arts and sciences in one channel only, and had to be satisfied with tracing their sources to Greece and Rome, and thence down the main stream of European civilisation, we have now for many of them one or two parallel histories in India and in China. The history of geometry, for instance, —the first formation of geometrical conceptions or technical terms— was hitherto known to us from Greece only: now we can compare the gradual elaboration of geometrical principles both in Greece and India, and thus arrive at some idea of what is natural or inevitable, and what is accidental or purely personal in each. It was known, for instance, that in Greece the calculation of solid figures began with the building of altars, and you will hear to-day from Dr. Thibaut, that in India also the first impulse to geometric science was given, not by the measuring of fields, as the name implies, but by the minute observances in building altars.

Similar coincidences and divergences have been brought to light by a comparative study of the history of astronomy, of music, of

grammar, but, most of all, by a comparative study of philosophic thought. There are indeed few problems in philosophy which have not occupied the Indian mind, and nothing can exceed the interest of watching the Hindu and the Greek, working on the same problems, each in his own way, yet both in the end arriving at much the same results. Such are the coincidences between the two, that but lately an eminent German professor[1] published a treatise to show that the Greeks had borrowed their philosophy from India, while others lean to the opinion that in philosophy the Hindus are the pupils of the Greeks. This is the same feeling which impelled Dugald Stewart, when he saw the striking similarity between Greek and Sanskrit, to maintain that Sanskrit must have been put together after the model of Greek and Latin by those arch-forgers and liars, the Brahmans, and that the whole of Sanskrit literature was an imposition. The comparative method has put an end to such violent theories. It teaches us that what is possible in one country is possible also in another; it shows us that, as there are antecedents for Plato and Aristotle in Greece, there are antecedents for the Vedânta and Sânkhya philosophies in India, and that each had its own independent growth. It is true, that when we first meet in Indian philosophy with our old friends, the four or five elements, the atoms, our metaphysics, our logic, our syllogism, we are startled; but we soon discover that, given the human mind and human language, and the world by which we are surrounded, the different systems of philosophy of Thales and Hegel, of Vyâsa and Kapila, are inevitable solutions. They all come and go, they are maintained and refuted, till at last all philosophy ends where it ought to begin, with an inquiry into the necessary conditions and the inevitable forms of knowledge, represented by a criticism of Pure Reason and, what is more important still, by a criticism of Language.

Much has been done of late for Indian philosophy, particularly by Ballantyne and Hall, by Cowell and Gough, by the editors of the *Bibliotheca Indica*, and the *Pandit*. Yet it is much to be desired, that some young scholars, well versed in the history of European philosophy, should devote themselves more ardently to this promising branch of Indian literature. No doubt, they would find it a great

[1] Aristoteles' Metaphysik, eine Tochter der Sânkhya-Lehre des Kapila, von Dr. C. B. Schlüter. 1874.

help, if they were able to spend some years in India, in order to learn from the last and fast disappearing representatives of some of the old schools of Indian philosophy what they alone can teach. What can be done by such a combination of Eastern and Western knowledge, has lately been shown by the excellent work done by Dr. Kielhorn, the Professor of Sanskrit at the Deccan College in Punah. But there is now so much of published materials, and Sanskrit MSS. also are so easily obtained from India, that much might be done in England, or in France, or in Germany — much that would be of interest not only to Oriental scholars, but to all philosophers whose powers of independent appreciation are not entirely blunted by their study of Plato and Aristotle, of Berkeley, Hume, and Kant.

I have so far dwelt chiefly on the powerful influence which the East, and more particularly India, has exercised on the intellectual life and work of the West. But the progress of Oriental scholarship in Europe, and the discovery of that spiritual relationship which binds India and England together, has likewise produced practical effects of the greatest moment in the East. The Hindus, in their first intercourse with English scholars, placed before them the treasures of their native literature with all the natural pride of a nation that considered itself the oldest, the wisest, the most enlightened nation in the world. For a time, but for a short time only, the claims of their literature to a fabulous antiquity were admitted, and dazzled by the unexpected discovery of a new classical literature, people raved about the beauty of Sanskrit poetry in truly Orintal strains. Then followed a sudden reaction; and the natives themselves, on becoming more and more acquainted with European history and literature, began to feel the childishness of their claims, and to be almost ashamed of their own classics. This was a national misfortune. A people that cannot feel some pride in the past, in its history and literature, loses the mainstay of its national character. When Germany was in the very depth of its political degradation, it turned to its ancient literature, and drew hope for the future from the study of the past. Something of the same kind is now passing in India. A new taste, not without some political ingredients, has sprung up for the ancient literature of the country; a more intelligent appreciation of their real merits has taken the place of the extravagant admiration for the masterworks of their old poets; there is a revival

in the study of Sanskrit, a surprising activity in the republication of Sanskrit texts, and there are traces among the Hindus of a growing feeling, not very different from that which Tacitus described, when he said of the Germans: "Who would go to Germany, a country without natural beauty, with a wretched climate, miserable to cultivate or to look at—*unless it be his fatherland?*"

Even the discovery that Sanskrit, English, Greek, and Latin are cognate languages, has not been without its influence on the scholars and thinkers, on the leaders of public opinion, in India. They, more than others, had felt for the time most keenly the intellectual superiority of the West, and they rose again in their own estimation by learning that physically, or, at all events, intellectually, they had been and might be again, the peers of Greeks and Romans and Saxons. These silent influences often escape the eye of the politician and the historian, but at critical moments they may decide the fate of whole nations and empires.[1]

[1] In the 'Indian Mirror,' published at Calcutta, 20th September, 1874, a native writer gave utterance almost at the same time to the same feelings:

"When the dominion passed from the Mogul to the hands of Englishmen, the latter regarded the natives as little better than niggers, having a civilization perhaps a shade better than that of the barbarians. . . . The gulf was wide between the conquerors and the conquered. . . . There was no affection to lessen the distance between the two races. . . . The discovery of Sanskrit entirely revolutionized the course of thought and speculations. It served as the 'open sesame' to many hidden treasures. It was then that the position of India in the scale of civilization was distinctly apprehended. It was then that our relations with the advanced nations of the world were fully realised. We were niggers at one time. We now became brethren. . . . The advent of the English found us a nation low sunk in the mire of superstitions, ignorance, and political servitude. The advent of scholars like Sir William Jones found us fully established in a rank above that of every nation as that from which modern civilization could be distinctly traced. It would be interesting to contemplate what would have been our position if the science of philology had not been discovered. . . . It was only when the labours of scholars brought to light the treasures of our antiquity that they perceived how near we were to their races in almost all things that they held dear in their life. It was then that our claims on their affection and regard were first established. As Hindus we ought never to forget the labours of scholars. We owe them our life as a nation, our freedom as a recognized society, and our position in the scale of races. It is the fashion with many to decry the labours of those men as dry, unprofitable, and dreamy. We should know that it is to the study of the roots and inflections of the Sanskrit language that we owe our national salvation. . . . Within a very few years after the discovery of Sanskrit, a revolution took place in the history of comparative science. Never were so many discoveries made at once, and from the speculations of learned scholars like . . . the dawnings of many

The intellectual life of India at the present moment is full of interesting problems. It is too much the fashion to look only at its darker sides, and to forget that such intellectual regenerations as we are witnessing in India, are impossible without convulsions and failures. A new race of men is growing up in India, who have stepped, as it were, over a thousand years, and have entered at once on the intellectual inheritance of Europe. They carry off prizes at English schools, take their degrees in English Universities, and are in every respect our equals. They have temptations which we have not, and now and then they succumb: but we too have temptations of our own, and we do not always resist. One can hardly trust one's eyes in reading their writings, whether in English or Bengali, many of which would reflect credit on our own Quarterlies. With regard to what is of the greatest interest to us, their scholarship, it is true that the old school of Sanskrit scholars is dying out, and much will die with it which we shall never recover; but a new and most promising school of Sanskrit students, educated by European Professors, is springing up, and they will, nay, to judge from recent controversies, they have already become most formidable rivals to our own scholars. The essays of Dr. Bhao Daji, whom, I regret to say, we have lately lost by death, on disputed points in Indian archaeology and literature, are most valuable. The indefatigable Rajendralal Mitra is rendering most excellent service in the publications of the Asiatic Society at Calcutta, and he discusses the theories of European Orientalists with all the ease and grace of an English reviewer. The Râjah of Besmah, Giriprasâda-sinha, has just finished his magnificent edition of the White Yajur-veda. The Sanskrit books published at Calcutta by Târânâtha and others form a complete library, and Târânâtha's new Dictionary of the Sanskrit language will prove most useful and valuable. The editions of Sanskrit texts published at Bombay by Prof. Bhâṇḍârkar, Shankur Pandurang Pandit, and others, need not fear comparison with the best work of European scholars. There is a school of native students at Benares whose publications, under the auspices of Mr. Griffith, have made their journal, the *Pandit*, indispensable to every Sanskrit scholar. Râjârâ-

truths are even now visible to the world. . . . Comparative mythology and comparative religion are new terms altogether in the world. . . . We say again that India has no reason to forget the services of scholars."

maśâstrî's and Bâlaśâstrî's edition of the Mahâbhâshya has received the highest praise from European students. In the 'Antiquary,' a paper very ably conducted by Mr. Burgess, we meet with contributions from several learned natives, among them from his Highness the Prince of Travancore, from Ram Dass Sen, the Zemindar of Berhampore, from Kâshinâth Trimbak Telang, from Sashagiriśâstrî, and others, which are read with the greatest interest and advantage by European scholars. The collected essays of Ram Dass Sen well deserve a translation into English, and Rajanîkânta's Life of the poet Jajadeva, just published, bears witness to the same revival of literary tastes and patriotic feelings.

Besides this purely literary movement, there is a religious movement going on in India, the Brahmosamâj, which, both in its origin and its later development, is mainly the result of European influences. It began with an attempt to bring the modern corrupt forms of worship back to the purity and simplicity of the Vedas; and by ascribing to the Veda the authority of a Divine Revelation, it was hoped to secure that infallible authority without which no religion was supposed to be possible. How was that movement stopped, and turned into a new channel? Simply by the publication of the Veda, and by the works of European scholars, such as Stephenson, Mill, Rosen, Wilson, and others, who showed to the natives what the Veda really was, and made them see the folly of their way. Thus the religion, the literature, the whole character of the people of India is becoming more and more Indo-European. They work for us, as we work for them. Many a letter have I received from native scholars in which they express their admiration for the wonderful achievements of European ingenuity, for railways, and telegraphs, and all the rest: and yet what, according to their own confession, has startled them and delighted them most, is the interest we have taken in their literature, and the new life which we have imparted to their ancient history. I know these matters seem small, when we are near to them, when we are in the very midst of them. Like the tangled threads hanging on a loom, they look worthless, purposeless. But history weaves her woof out of all of them, and after a time, when we see the full and finished design, we perceive that no colour, however quiet, could have been dropped, no shade, however slight, could have been missed, without spoiling the whole.

And now, after having given this account of our stewardship, let me say in conclusion a few words on the claims which Oriental studies have on public sympathy and support.

Let me begin with the Universities—I mean of course the English Universities—and more particularly that University which has been to me for many years an *Alma Mater*, Oxford. While we have there, or are founding there, professorships for every branch of Theology, Jurisprudence, and Physical Science, we have hardly any provision for the study of Oriental languages. We have a chair of Hebrew, rendered illustrious by the greatest living theologian of England, and we have a chair of Sanskrit, which has left its mark in the history of Sanskrit literature; but for the modern languages of India, whether Aryan or Dravidian, for the language and literature of Persia, both ancient and modern, for the language and antiquities of Egypt and Babylon, for Chinese, for Turkish, nay even for Arabic, there is nothing deserving the name of a chair. When in a Report on University Reform, I ventured to point out these gaps, and to remark that in the smallest of German Universities most of these subjects were represented by professors, I was asked whether I was in earnest in maintaining that Oxford, the first University in what has rightly been called the greatest Oriental Empire, ought really to support the study of Oriental languages.

The second claim we prefer is on the Missionary Societies. I have lately incurred very severe obloquy for my supposed hostility to missionary enterprise. All I can say is, I wish that there were ten missionaries for every one we have now. I have always counted missionaries among my best friends; I have again and again acknowledged, how much Oriental studies, and linguistic studies in general, owe to them, and I am proud to say that, even now, while missionaries at home have abused me in unmeasured language, missionaries abroad, devoted, hard-working missionaries, have thanked me for what I said of them and their work in my lay-sermon in Westminster Abbey last December.

Now it seems to me that, first of all, our Universities, and I think again chiefly of Oxford, might do much more for missions than they do at present. If we had a sufficient staff of professors for Eastern languages, we could prepare young missionaries for their work, and we should be able to send out from time to time such

men as Patteson, the Bishop of Melanesia, who was every inch an Oxford man. And in these missionaries we might have not only apostles of religion and civilisation, but at the same time, the most valuable pioneers of scientific research. I know there are some authorities at home who declare that such a combination is impossible, or at least undesirable; that a man cannot serve two masters, and that a missionary must do his own work and nothing else. Nothing, I believe, can be more mistaken. First of all, some of our most efficient missionaries have been those who have done also the most excellent work as scholars, and whenever I have conversed on this subject with missionaries who have seen active service, they all agree that they cannot be converting all day long, and that nothing is more refreshing and invigorating to them than some literary or scientific work. Now what I should like to see is this: I should like to see ten or twenty of our non-resident fellowships, which at present are doing more harm than good, assigned to missionary work, to be given to young men who have taken their degree, and who, whether laymen or clergymen, are willing to work as assistant missionaries on distant stations; with the distinct understanding, that they should devote some of their time to scientific work, whether the study of languages, or flowers, or stars, and that they should send home every year some account of their labours. These men would be like scientific consuls, to whom students at home might apply for information and help. They would have opportunities of distinguishing themselves by really useful work, far more than in London, and after ten years, they might either return to Europe with a well-established reputation, or if they find that they have a real call for missionary work, devote all their life to it. Though to my own mind there is no nobler work than that of a missionary, yet I believe that some such connection with the Universities and men of science would raise their position, would call out more general interest, and secure to the missionary cause the good-will of those whose will is apt to become law.

Thirdly, I think that Oriental studies have a claim on the colonies and the colonial governments. The English colonies are scattered all over the globe, and many of them in localities where an immense deal of useful scientific work might be done, and would be done

with the slightest encouragement from the local authorities, and something like a systematic supervision on the part of the Colonial Office at home. Some years ago I ventured to address the Colonial Secretary of State on this subject, and a letter was sent out in consequence to all the English colonies, inviting information on the languages, monuments, customs, and traditions of the native races. Some most valuable reports have been sent home during the last five or six years, but when it was suggested that these reports should be published in a permanent form, the expense that would have been required for printing every year a volume of Colonial Reports, and which would not have amounted to more than a few hundred pounds for all the colonies of the British Empire, part of it to be recovered by the sale of the book, was considered too large.

Now we should bear in mind that at the present moment some of the tribes living in or near the English colonies in Australia, Polynesia, Africa, and America, are actually dying out, their languages are disappearing, their customs, traditions, and religions will soon be completely swept away. To the student of language, the dialect of a savage tribe is as valuable as Sanskrit or Hebrew, nay, for the solution of certain problems, more so; every one of these languages is the growth of thousands and thousands of years, the workmanship of millions and millions of human beings. If they were now preserved, they might hereafter fill the most critical gaps in the history of the human race. At Rome at the time of the Scipios, hundreds of people might have written down a grammar and dictionary of the Etruscan language, of Oscan, or Umbrian; but there were men then, as there are now, who shrugged their shoulders, and said, What can be the use of preserving these barbarous, uncouth idioms?—What would we not give now for some such records?

And this is not all. The study of savage tribes has assumed a new interest of late, when the question of the exact relation of man to the rest of the animal kingdom has again roused the passions not only of scientific inquirers, but also of the public at large. Now what is wanted for the solution of this question, are more facts and fewer theories, and these facts can only be gained by a patient study of the lowest races of mankind. When religion was held to be the specific character of man, it was asserted by many travellers that they had

seen races without any religious ideas; when language was seen to be the real frontier line between man and beast, it was maintained that there were human beings without language. Now all we want to know are facts, let the conclusions be whatever they may. It is by no means easy to decide whether savage tribes have a religion or not; at all events it requires the same discernment, and the same honesty of purpose, as to find out whether men of the highest intellect among ourselves have a religion or not. I call the Introduction to Spencer's First Principles deeply religious, but I can well understand that a missionary, reporting on a tribe of Spencerian savages, might declare that they had no idea whatsoever of religion. Looking at a report sent home lately by the indefatigable Governor of New South Wales, Sir Hercules Robinson, I find the following description of the religious ideas of the Kamilarois, one of the most degraded tribes in the North-western district of the colony:—

"*Bhaiami* is regarded by them as the maker of all things. The name signifies 'maker,' or 'cutter-out,' from the verb *bhai, baialli, baia.* He is regarded as the rewarder and punisher of men according to their conduct. He sees all, and knows all, if not directly, through the subordinate deity *Turramûlan,* who presides at the Bora. *Bhaiami* is said to have been once on the earth. *Turramûlan* is mediator in all the operations of *Bhaiami* upon man, and in all man's transactions with *Bhaiami. Turramûlan* means 'leg on one side only,' 'one-legged.'"

This description is given by the Rev. C. Greenway, and if there is any theological bias in it, let us make allowance for it. But there remains the fact that *Bhaiami,* their name for deity, comes from a root *bhai,* to 'make,' to 'cut out,' and if we remember that hardly any of the names for deity either among the Aryan or Semitic nations, comes from a root with so abstract a meaning, we shall admit, I think, that such reports as these should not be allowed to lie forgotten in the pigeon-holes of the Colonial Office, or in the pages of a monthly journal.

What applies to religion, applies to language. We have been told again and again that the Veddahs in Ceylon have no language. Sir Emerson Tennant wrote "that they mutually make themselves understood by signs, grimaces, and guttural sounds, which have little resemblance to definite words or language in general." When these

statements were repeated, I tried to induce the Government of Ceylon to send a competent man to settle the question. I did not receive all I wanted, and therefore postponed the publication of what was sent me. But I may say so much, that more than half of the words used by the Veddahs are, like Singhalese itself, mere corruption of Sanskrit; their very name is the Sanskrit word for hunter, *veddhâ*, or, as Mr. Childers supposes, *vyádha*. There is a remnant of words in their language of which I can make nothing as yet. But so much is certain: either the Veddahs started with the common inheritance of Aryan words and ideas; or, at all events, they lived for a long time in contact with Aryan people, and adopted from them such words as were wanting in their language. If they now stand low in the scale of humanity, they once stood higher—nay, they may possibly prove, in language, if not in blood, the distant cousins of Plato, and Newton, and Goethe.

It is most essential to keep *la carrière ouverte* for facts, even more than for theories, and for the supply of such facts the Colonial Government might render most useful service.

It is but right to state that whenever I have applied to the Governors of any of the Colonies, I have invariably met with the greatest kindness and readiness to help. Some of them take the warmest interest in these researches. Sir George Grey's services to the science of language have hardly been sufficiently appreciated as yet, and the Linguistic Library which he founded at the Cape places him of right by the side of Sir Thomas Bodley. Sir Hercules Robinson, Mr. Musgrave in South Australia, Sir Henry Barkley at the Cape, and several others, are quite aware of the importance of linguistic and ethnological researches. What is wanted is encouragement from home, and some systematic guidance. Dr. Bleek, the excellent librarian of Sir George Grey's Library at the Cape, who has devoted the whole of his life to the study of savage dialects, and whose Comparative Grammar of the South African languages will hold its place by the side of Bopp's, Diez's, and Caldwell's Comparative Grammars, is most anxious that there should be a permanent linguistic and ethnological station established at the Cape; in fact, that there should be a linguist attached to every zoological station. At the Cape there are not only the Zulu dialects to be studied, but two most important languages, that of the Hottentots, and that of

the Bushmen. Dr. Bleek has lately been enabled to write down several volumes of traditional literature from the mouths of some Bushman prisoners; but he says, "My powers and my life are drawing to an end, and unless I have some young men to assist me, and carry on my work, much of what I have done will be lost." There is no time to be lost, and I trust therefore that my appeal will not be considered importunate by the present Colonial Minister.

Last of all, we turn to India, the very cradle of Oriental scholarship, and here, instead of being importunate and urging new claims for assistance, I think I am expressing the feelings of all Oriental scholars in publicly acknowledging the readiness with which the Indian Government, whether at home or in India, whether during the days of the old East India Company, or now under the auspices of the Secretary of State, has always assisted every enterprise tending to throw light on the literature, the religion, the laws and customs, the arts and manufactures of that ancient Oriental Empire.

Only last night I received the first volume of a work which will mark a new era in the history of Oriental typography. Three valuable MSS. of the Mahâbhâshya have been photolithographed at the expense of the Indian Government, and under the supervision of one whom many of us will miss here to-day, the late Professor Goldstücker. It is a magnificent publication, and as there are only fifty copies printed, it will soon become more valuable than a real MS.

There are two surveys carried on at the present moment in India, a literary, and an archaeological survey. Many years ago, when Lord Elgin went to India as Governor-General, I suggested to him the necessity of taking measures in order to rescue from destruction whatever could still be rescued of the ancient literature of the country. Lord Elgin died before any active measures could be taken, but the plan found a most powerful advocate in Mr. Whitley Stokes, who urged the Government to appoint some Sanskrit scholars to visit all places containing collections of Sanskrit MSS., and to publish lists of their titles, so that we might know, at all events, how much of a literature, that had been preserved for thousands of years, was still in existence at the present moment. This work was confided to Dr. Bühler, Dr. Kielhorn, Mr. Burnell, Rajendralal Mitra, and others. Several of their catalogues have been published, and there is but one feeling among all Sanskrit scholars as to the value

of their work. But they also feel, that the time has come for doing more. The mere titles of the MSS. whet our appetite, but do not satisfy it. There are, of course, hundreds of books where the title, the name of the author, the *locus et annus* are all we care to know. But of books which are scarce, and hitherto not known out of India, we want to know more. We want some information of the subject and its treatment, and if possible, of the date, of the author, and of the writers quoted by him. We want extracts, intelligently chosen, in fact, we want something like the excellent catalogue which Dr. Aufrecht has made for the Bodleian Library. In Mr. Burnell, Dr. Bühler, Dr. Kielhorn, the Government possesses scholars who could do that work admirably; what they want is more leisure, more funds, more assistance.

Contemporaneously with the Literary Survey, there is the Archaeological Survey, carried on by that gallant and indefatigable scholar, General Cunningham. His published reports show the systematic progress of his work, and his occasional communications in the Journal of the Asiatic Society of Bengal tell us of his newest discoveries. The very last number of that journal brought us the news of the discovery of the wonderful ruins of the Buddhist temple of Bharahut,[1] which, with their representations of scenes from the early Buddhist literature, with their inscriptions and architectural style, may enable us to find a *terminus a quo* for the literary and religious history of India. We should not forget the services which Mr. Fergusson has rendered to the history of Indian architecture, both by awakening an interest in the subject, and by the magnificent publication of the drawings of the sculptures of Sanchi and Amravati, carried on under the authority of the Secretary of State for India. Let us hope that these new discoveries may supply him with materials for another volume, worthy of its companion.

It was supposed for a time that there was a third survey carried on in India, ethnological and linguistic, and the volume, published by Colonel Dalton, *Descriptive Ethnology of Bengal*, with portraits from photographs, was a most excellent beginning. But the other Indian Governments have not hitherto followed the example of the Bengal Government, and nothing has of late come to my knowledge

[1] *Academy*, August 1, 1874.

in this important line of research. Would not Dr. Hunter, who has done so much for a scientific study of the non-Aryan languages and races of India, take up this important branch of research, and give us, not only photographs and graphic description, but also, what is most wanted, scholarlike grammars of the principal races of India? Lists of words, if carefully chosen, like those in Colonel Dalton's work and in Sir George Campbell's Specimens, are, no doubt, most valuable for preliminary researches, but without grammars, none of the great questions which are still pending in Indian Ethnology will ever be satisfactorily and definitely settled. No real advance has been made in the classification of Indian dialects since the time when I endeavoured, some twenty years ago, to sum up what was then known on that subject, in my letter to Bunsen 'On the Turanian Languages.' What I then for the first time ventured to maintain against the highest authorities in Indian linguistic ethnology, viz. that the dialects of the Mundas or the Koles constituted a third and totally independent class of languages in India, related neither to the Aryan nor to the Dravidian families, has since been fully confirmed by later researches, and is now, I believe, generally accepted. The fact also, on which I then strongly insisted, that the Uraon Koles, and Rajmahal Koles, might be Koles in blood, but certainly not in language, their language being, like that of the Gonds, Dravidian, is now no longer disputed. But beyond this, all is still as hypothetical as it was twenty years ago, simply because we can get no grammars of the Munda dialects. Why do not the German missionaries at Ranchi, who have done such excellent work among the Koles, publish a grammatical analysis of that interesting cluster of dialects? Only a week ago, one of them, Mr. Jellinghaus, gave me a grammatical sketch of the Mundâri language, and even this, short as it is, was quite sufficient to show that the supposed relationship between the Munda dialects and the Khasia language, of which we have a grammar, is untenable. The similarities pointed out by Mason between the Munda dialects and the Talaing of Pegu, are certainly startling, but equally startling are the divergences; and here again no real result will be obtained without a comparison of the grammatical structure of the two languages. The other classes of Indian languages, the *Taic*, the *Gangetic*, subdivided into *Trans-Himalayan* and *Sub-Himalayan*, the *Lohitic*, and *Tamulic*, are still

retained, though some of their names have been changed. Without wishing to defend the names which I had chosen for these classes, I must say that I look upon the constant introduction of new technical terms as an unmixed evil. Every classificatory term is imperfect. Aryan, Semitic, Hamitic, Turanian, are all imperfect, but, if they are but rightly defined, they can do no harm, whereas a new term, however superior at first sight, almost makes confusion worse confounded. The chemists do not hesitate to call sugar an acid rather than part with an old-established term; why should not we in the science of language follow their good example?

Dr. Leitner's labours in Dardistan should here be mentioned. They date from the year 1866. Considering the shortness of the time allotted to him for exploring that country, he has been most successful in collecting his linguistic materials. We owe to him a vocabulary of two Shinâ dialects (the Ghilghiti and Astori), and of the Arnyia, the Khajuna, and the Kalâsha-Mânder. These vocabularies are so arranged as to give us a fair idea of the systems of conjugation and declension. Other vocabularies, arranged according to subjects, allow us an insight into the intellectual life of the Shinas, and we also receive most interesting information on the customs, legends, superstitions and religion of the Dards. Some of the important results obtained by the same enterprising scholar in his excavations on the Takht-i-bahi hills will be laid before the Archaeological Section of this Congress. It is impossible to look at the Buddhist sculptures which he has brought home, without perceiving that there is in them a foreign element. They are Buddhist sculptures, but they differ both in treatment and expression from what was hitherto known of Buddhist art in various parts of the world. Dr. Leitner thinks that the foreign element came from Greece, others think that local and individual influences are sufficient to account for the apparent deviations from the common Buddhist type. On this point I feel totally incompetent to express an opinion, but whatever the judgment of our archaeological colleagues may be, neither they nor we ourselves can have any doubt that Dr. Leitner deserves our sincere gratitude, as an indefatigable explorer and successful discoverer.

Many of the most valuable treasures of every kind and sort, collected during these official surveys, and by private enterprise, are

now deposited in the Indian Museum in London, a real mine of literary and archaeological wealth, opened with the greatest liberality to all who are willing to work in it.

It is unfortunate, no doubt, that this meeting of Oriental scholars should have taken place at a time when the treasures of the Indian Museum are still in their temporary exile; yet, if they share in the regret, felt by every friend of India, at the delay in the building of a new museum, worthy both of England and of India, they will also carry away the conviction, that such delay is simply due to a desire to do the best that can be done, in order to carry out in the end something little short of that magnificent scheme of an Indian Institute, drawn by the experienced hand of Dr. Forbes Watson.

And now, in conclusion, I have to express my own gratitude for the liberality both of the Directors of the old East India Company and of the present Secretary of State for India in Council, for having enabled me to publish that work the last sheet of which I am able to present to this Meeting to-day, the Rig-veda, with the Commentary of Sâyaṇâkârya. It is the oldest book of the Aryan world, but it is also one of the largest, and its publication would have been simply impossible without the enlightened liberality of the Indian Government. For twenty-five years I find, that taking the large and small editions of the Rig-veda together, I have printed every year what would make a volume of about six hundred pages *octavo*. Such a publication would have ruined any bookseller, for it must be confessed, that there is little that is attractive in the Veda, nothing that could excite general interest. From an aesthetic point of view, no one would care for the hymns of the Rig-veda, and I can well understand how, in the beginning of our century, even so discriminating a scholar as Colebrooke could express his opinion, that "the Vedas are too voluminous for a complete translation, and what they contain would hardly reward the labour of the reader, much less that of the translator. The ancient dialect in which they are composed, and specially that of the three first Vedas, is extremely difficult and obscure; and, though curious, as the parent of a more polished and refined language, its difficulties must long continue to prevent such an examination of the whole Vedas, as would be requisite for extracting all that is remarkable and important in those voluminous works. But they well deserve to be *occasionally* con-

sulted by the Oriental scholar." Nothing shows the change from the purely aesthetic to the purely scientific interest in the language and literature of India more clearly than the fact that for the last twenty-five years the work of nearly all Sanskrit scholars has been concentrated on the Veda. When some thirty years ago I received my first lessons in Sanskrit from Professor Brockhaus, whom I am happy and proud to see to-day among us, there were but few students who ventured to dive into the depths of Vedic literature. To-day among the Sanskrit scholars whom Germany has sent to us—Professors Stenzler, Spiegel, Weber, Haug, Pertsch, Windisch—there is not one who has not won his laurels on the field of Vedic scholarship. In France also a new school of Sanskrit students has sprung up who have done most excellent work for the interpretation of the Veda, and who bid fair to rival the glorious school of French Orientalists at the beginning of this century, both by their persevering industry and by that "sweetness and light" which seems to be the birthright of their nation. But, I say again, there is little that is beautiful, in our sense of the word, to be found in the hymns of the Rig-veda, and what little there is, has been so often dwelt on, that quite an erroneous impression as to the real nature of Vedic poetry has been produced in the mind of the public. My old friend, the Dean of St. Paul's, for instance, in some thoughtful lectures which he delivered this year on the 'Sacred Poetry of Early Religions,' has instituted a comparison between the Psalms and the hymns of the Veda, and he arrives at the conclusion that the Psalms are superior to the Vedic hymns. No doubt they are, from the point of view which he has chosen, but the chief value of these hymns lies in the fact that they are so different from the Psalms, or, if you like, that they are so inferior to the Psalms. They are Aryan, the Psalms Semitic; they belong to a primitive and rude state of society, the Psalms, at least most of them, are contemporaneous with or even later than the heydays of the Jewish monarchy. This strange misconception of the true character of the Vedic hymns seemed to me to become so general, that when some years ago I had to publish the first volume of my translation, I intentionally selected a class of hymns which should in no way encourage such erroneous opinions. It was interesting to watch the disappointment. What, it was said,

are these strange, savage, grotesque invocations of the Storm-gods, the inspired strains of the ancient sages of India? Is this the wisdom of the East? Is this the primeval revelation? Even scholars of high reputation joined in the outcry, and my friends hinted to me that they would not have wasted their life on such a book.

Now, suppose a geologist had brought to light the bones of a fossil animal, dating from a period anterior to any in which traces of animal life had been discovered before, would any young lady venture to say by way of criticism, "Yes, these bones are very curious, but they are not pretty!" Or suppose a new Egyptian statue had been discovered, belonging to a dynasty hitherto unrepresented by any statues, would even a schoolboy dare to say, "Yes, it is very nice, but the Venus of Milo is nicer." Or suppose an old MS. is brought to Europe, do we find fault with it, because it is not neatly printed? If a chemist discovers a new element, is he pitied because it is not gold? If a botanist writes on germs, has he to defend himself, because he does not write on flowers? Why, it is simply *because* the Veda is so different from what it was expected to be, *because* it is not like the Psalms, not like Pindar, not like the Bhagavadgîtâ, it is *because* it stands by itself, and reveals to us the earliest germs of religious thought, such as they really were; it is *because* it places before us a language, more primitive than any we knew before; it is *because* its poetry is what you call savage, uncouth, stupid, horrible, it is for that very reason that it was worth while to dig and dig till the old buried city was recovered, showing us what man was, what we were, before we had reached the level of David, the level of Homer, the level of Zoroaster, showing us the very cradle of our thoughts, our words, and our deeds. *I* am not disappointed with the Veda, and I shall conclude my address with the last verses of the last hymn, which you have now in your hands, —verses which thousands of years ago may have been addressed to a similar meeting of Aryan fellow-men, and which are not inappropriate to our own:

Sám ga*kkh*adhvam sám vadadhvam sám va*h* mánā*m*si *g*ānatām,
Devā́*h* bhāgám yáthā pū́rve[1] sa*mg*ānānā́*h* upā́sate.
Samānā́*h* mántra*h* sámiti*h* samānī́ samānám mána*h* sahá *k*ittám eshām,

[1] I read yathāpūrve as one word.

Samānám mántram abhí mantraye vaḥ samānéna vaḥ havíshā ǧuhomi.
Samānī́ vaḥ ā́kūtiḥ samānā́ hr̥ídayāni vaḥ,
Samānám astu vaḥ mánaḥ yáthā vaḥ súsaha ásati.

"Come together! Speak together! Let your minds be concordant —the gods by being concordant receive their share, one after the other. Their word is the same, their counsel is the same, their mind is the same, their thoughts are at one: I address to you the same word, I worship you with the same sacrifice. Let your endeavour be the same! Let your hearts be the same! Let your mind be the same, that it may go well with you."

I declare the Aryan Section of our Congress opened.

ON THE

HINDU DOCTRINE OF EXPIATION.

By Professor STENZLER.

The doctrine of expiation *(prāyaçcitta)* is one of the most powerful means in the hands of the Hindu priests for exercising an influence on the people at large.

It generally forms the third principal part of the contents of their law-books. The two other parts are the *ācāra*, the customs and manners of family and social life, and the *vyavahāra*, or judicial proceeding, that is to say, civil and criminal law, the execution of which constitutes a duty of the king.

There is one circumstance which affords a peculiar interest to all historical researches on the gradual development of Hindu life in its various spheres and directions. This is the possibility they offer of tracing back almost every institution of the present time through thousands of years, until we observe its first germ in the Vedic times.

And this whole development of Hindu life has mainly proceeded from the spirit of the nation itself.

From time to time indeed a foreign seed has fallen on Indian soil; the Hindus have nursed and assimilated it to their own life, but it has not been able essentially to alter the national character of the people. The present generation still remembers the same gods whom their forefathers adored thousands of years ago. Even to-day every father impresses upon the mind of his son those rules of behaviour which we find traced out with such nicety in the ancient law-books. Even now the goods and chattels of a father are entailed

upon those members of the family who are entitled to inherit them by the *Dharmaçāstra* of the *Mānavas*.

The nations of Europe offer a remarkable contrast to this appearance. One of the most important points is the change of religion. The whole dough of Paganism has been leavened by Christianity, the power of which even the Greek spirit, whatever we may think of the charms of its productions or of the clearness and strength of its argumentations, has not been able to withstand. Moreover, a great many customs, originating in Roman Paganism, but afterwards dressed in a Christian garment, have been obtruded on the other nations of Europe by the missionaries of the Roman Catholic Church, under the pretence of their being essential elements of the Christian religion.

From this point of view it will be of some interest to observe how the doctrine of atonement or expiation, which even at the present time has so enormous an influence on Hindu life, has originated and has been gradually changed, so as to receive its present form.

I will try, as far as my literary resources allow, to give a broad outline of the history of this doctrine.

The word by which atonement or expiation is designated is *prāyaçcitta*, or in the older writings *prāyaçcitti*.

It does not occur in the songs of the Rigveda, but we find it very often employed in the prosaic writings of the Vedic period, in the *Brāhmaṇas* and in the *Sūtras*, though in a sense different from that which it has in later times.

It does not mean there an *expiation* of a *sin* committed, but merely a remedy for redressing a grievance or removing a mischief. I will quote only one of numberless instances; we find in the T. S. (2, 1, 4, 1) the following passage: *asāv ādityo na vyarocata, tasmai devāḥ prāyaçcittim aichan:* "Yonder sun did not shine, then the gods sought for a remedy," where the commentary appropriately explains it by *pratikāra*.

A very common application of the word is the following. Whenever in a sacrifice any negligence has been committed or an untoward accident has happened, the success of the sacrifice would be entirely annihilated unless a *prāyaçcitta*, a remedy, were instantly applied. So, *e.g.*, when the sacrificer has incautiously uttered an improper worldly word, the *prāyaçcitta* consists in immediately pronouncing

a verse addressed to *Vishṇu*. Other *prāyaçcittas* are ordained, when the sacrificer by imprudence has chosen a priest who by some reason is not entitled to co-operation in the sacrifice, or when any vessel used in the sacrifice is broken by accident, and so in similar cases.

With the same meaning the word appears also in the *Çrauta Sūtras*, e.g. *Açv. Çr. S.* (3, 10): *vidhyaparādhe prāyaçcittiḥ*, "When any precept (regarding the sacrifice) has been violated, a *prāyaçcitti* must take place," that is to say, a remedy must be employed to remove the evil consequences of this violation.

In later times the word is more directly transferred to the moral sphere. In *Pāraskara's Gṛi. Sū.* (3, 12) we find an *avakīrṇi-prāyaçcitta*, i.e. a *prāyaçcitta* of him who has broken the vow of chastity. But even here it does not clearly appear whether *Pāraskara* considers the deed committed as a sin, to which the man has been tempted, "drawn away of his own lust and enticed," and which, therefore, he might have avoided by strength of will, or whether he takes it merely for a mishap, which befell him without his own culpability. Even the public confession of his sin, which *Pāraskara* ordains *(svakarma parikīrtayan)*, may be taken as pointing to either side. Both notions seem to be blended with each other, and indeed we observe that by and by moral evils, by which a man is visited, are treated exactly in the same manner as corporal diseases.

Passing over to later times, we find the moral *prāyaçcitta*, or the real atonement or expiation, treated of in the *Dharmasūtras*, and in their transformations the *Dharmaçāstras*.

There is a remarkable passage in *Gautama's Dharmasūtra*, which, if I am not misled by the very incorrect MS. of the Berlin Library, may be thus literally translated.

"I have declared the law of the castes and the law of the classes *(āçrama)*.

"Now this person (or this soul? *ayam purushaḥ*) becomes defiled by a reprehensible deed.

"Such a deed is: performing a sacrifice for a person for whom one must not offer sacrifices; eating forbidden food; uttering words which ought not to be said; not doing what is ordained, or doing what is forbidden.

"For such a deed he must perform an expiation.

"Some persons reason *(mīmāmsante)* he must not do it.

"He must not do it, they say, because the deed does not perish. "Others say; he must do it."

The words, "the deed does not perish," which are here attributed to the opponents of expiation, contain the substance of the *karmavipāka*, or the doctrine of the ripening of the deeds, according to which every deed which a man commits draws on him those consequences which it necessarily must have in the course of the natural development of the universe.

Now the doctrine of expiation rests on the conception that a man is able to annihilate the consequences of an evil deed by another deed.

The doctrine of the *karmavipāka* is indeed also held by *Gautama;* he teaches it in the 20th chapter of his *Dharmasūtra*. If, nevertheless, he insists upon the necessity of expiation, the difference of the opinions is this.

The opponents of expiation, to whom *Gautama* alludes, hold that a deed once committed can by no means be reduced to nought; its consequences will inevitably ensue; therefore expiation is useless.

This opinion *Gautama* states as the *pūrvapaksha*.

In giving then his own *siddhānta* in the words, "he must do it," he does not condescend to controvert the opposite opinion by reasoning, but, a true believer in divine revelation, he opposes to it the authority of the Vedas, *e.g.* a passage of the *Çatapatha-Brāhmaṇa* (13, 3, 1, 1), *tarati sarvam pāpmānam, tarati brahmahatyām, yo 'çvamedhena yajate*, i.e. "he who performs the *Açvamedha* overcomes all sin, even the murder of a *Brāhmaṇa*."

In the *Dharmaçāstras*, with the *Mānava* at their head, we find the doctrine of expiation much more fully discussed and systematically represented.

I do not intend to enter into the single points of the doctrine, but I will only try to select some leading topics, which may afford a view of the different steps, by passing which the doctrine received its actual form.

The first point is the *classification* of the different sins which have to be atoned for by acts of expiation.

The class of *great sins (mahāpātaka)*, which in most of the *Dh. Ç.* stands at the head, appears already in a verse quoted in the *Chāndogya-Upanishad*. There is, however, one significant difference. The

stealing of *gold in general*, which the verse mentions, is in most of the *Dh. Ç.* restricted to the *gold of a Brâhmaṇa*.

The *Vishṇu Dh. Ç.* seems to stand alone in setting up a class of *excessive sins (atipâtaka)*.

After the enumeration of the different transgressions, there follows the *karmavipâka*, the ripening of the actions, above mentioned.

Before the sinner is born again, he must remain a long time in one of the different hells, in the description of which the lawyers have given full play to their imagination. The *Taittirîya-Âraṇyaka* mentions no more than four hells, whereas the *Mânava Dh. Ç.* enumerates twenty-one, and in Buddhism their number is, according to *Hardy*, raised to 136.

After having suffered an appropriate time in hell, the sinner returns into this world, and is born here in a state such as he deserved by his sins, either in the body of an animal, or in a low state of society, or affected with some bodily deficiency.

Now in order to escape these painful consequences of a sin, a man must perform expiation. Since, however, each peculiar sin can only be removed by a peculiar act of expiation, it is of the greatest importance that the sinner choose the correct expiation.

In order to be informed on this point, he must apply to a *parishad*, i.e. to an assembly or a court consisting either of *ten* persons *(daçâvarâ)*, who are acquainted with the Vedas, the philosophical systems and the *Dharmaçâstras*, or of *three* persons *(tryavarâ)*, or he may even consult only *one* person acquainted with the Vedas.

It is on this institution that not only the influential position of the priests, but also their livelihood, seems even in the present time in a great measure to rest.

I need not expatiate on their social position. It is well known, that as early as in the *Brâhmaṇas* they are called the *visible gods*. We find the same exaggeration in the early Christian church, *e.g.* in the *Constitutiones Apostolorum* (ii. 26) it is said of the bishop: οὗτος ὑμῶν ἐπίγειος θεὸς μετὰ θεὸν, "this is your terrestrial god, next to God." The high degree of their infallibility has found a remarkable expression in *Parâçara's Dh. Ç.*: "Whatever the *Brâhmaṇas*, driving along on the chariot of the *Dharmaçâstra*, with the sword of the Veda in their hands, whatever they say,

even by way of jest (krīḍārtham), that is declared to be the highest law."

With regard to the *pecuniary profit* accruing to the priests from this institution, the regulations of the different law-books show a conspicuous progress to their advantage.

In the first place it is but fair and reasonable that either the members of the *parishad*, or the single priest, who advised the sinner on the expiation to be performed, should receive a fee for this advice. Waiving this point, there are some expiations which consist of a religious act *and* a gift, and in these an important change takes place in the course of time. For the killing of a *Çūdra*, *Gautama* prescribes a religious act *and* the gift of ten cows and a bull. The *Mānava Dh. Ç.* leaves the option between the religious act and the gift of the cows. Now out of this alternative, an appraisement of the different acts of expiation has arisen, which is fully represented in the modern works on expiation, and seems to be still now in use.

A passage of the *Dh. Ç.* of *Samvarta* forms the basis of the price current of the expiations. There it is said: "If a man is not able to perform the expiation called *Prājāpatya*, he must give a milch cow, and if he has no cow, he must give the price of it."

According to this calculation, a man who has to perform another expiation, which is reckoned seventeen times as heavy as the *Prājāpatya*, may give seventeen cows, or the price of them in money. This money, of course, falls again into the pockets of the priests who formed the *parishad*.

Here now I come to a point on which I have not been able to find information in the books to which I have had access.

I do not know how the formation of a *parishad* is effected, or whether there are certain regulations, by which a man, who will perform an expiation, is directed to an individual priest; in short, whether, there exists in civil communities a kind of religious or ecclesiastical division, by means of which every person belongs to a particular parish, or has, as it were, a fixed confessor.

When I met Prof. Kielhorn on his visit in Europe, three years ago in Leipzig, I conversed with him on the law of expiation, and he told me it happened very often that a pupil of Deccan College

did not appear in the class, and was excused by the statement that he had a *prāyaçcitta* to perform. The Professor could not answer my question, who it was that dictated to him the *prāyaçcitta*, and promised to make inquiries about it.

I have here brought forward this question in the hope that perhaps one of the many scholars present may have had or will have from actual observation an opportunity of giving us information on a point on which the law-books are silent; which, however, seems to be of some importance for a penetration into the interior relations of Hindu life.

In conclusion, I may be allowed shortly to hint at the coincidence of the Hindu Law of Expiation with the Penitential Canons of the Christian Church of the early middle ages, particularly with those composed by Irish, British, and Anglo-Saxon priests.

I refer to the critical collection of these canons published by Prof. *Wasserschleben* of *Giessen*. Some of the points, in which they nearly agree with the Indian law-books, are the following.

The *four great sins* of the *Penitential Canon of Theodore* are the same as those of the *Chānd. Up.* and the *Dharmaçāstras*.

The moral transgressions and their expiations are treated exactly like bodily diseases and their cure; even in the *Roman Catechism*, which is now in use in the Roman Church, the priests are compared to physicians, just as is done in the Indian treatises on *prāyaçcitta*.

The redemption of an expiation by money is permitted on both sides. Also the substitution of other persons in the performance of an expiation is allowed in Europe as well as in India. In the Dh. Ç. of *Angiras* it is ordained, that for a child between five and eleven years of age, his *Guru* or a friend shall perform the *prāyaçcitta*, and the *Brahma Purāṇa* says, that a sick person, an old man and a child shall always have the *prāyaçcitta* performed by another person.

In the same manner the *Venerable Bede* allows a man, who is not able to sing a number of psalms, enjoined to him as a penance, to choose a righteous man who may do it in his stead and at his expense. In *King Edgar's* Penitential Canon, an expedient is declared, by which a rich man, who has to perform fasting for seven years, may discharge himself of his heavy penance in an easy manner. He

needs only to hire some 800 persons to fast in his stead, and they will accomplish his penance in three days.

I forbear entering into further particulars, because I am not inclined to derive this similarity from a historical connexion. But I am of opinion that an accurate comparison of them will not merely satisfy the transitory interest of curiosity, but by affording a view of the moral state both of the Indian and of the European nations, will lead us to form a just and mild judgment on our brother people on the borders of the Gangā.

ON THE

INTERPRETATION OF THE VEDA.

By Professor HAUG.

Books which are traced to divine origin, and consequently held sacred, have, on account of their bearing on the modes of thought and the religious and civil institutions of a people, always formed one of the most appropriate subjects for the exercise of the mental faculties in the way of speculations and interpretations of various kinds. The more their origin is lost in the depths of antiquity, the more the language in which they are composed has become obscure and unintelligible, the greater will be the obstacles the interpreters have to overcome. Of the utmost importance is here the condition of the text which is to be explained, the greater or lesser degree of correctness with which it has been preserved.

Since other sacred books, such as the Bible and the *Qurān*, have, from the very beginning, been committed to writing and exclusively transmitted in this manner, the *Veda* is the only sacred code that has been handed down to posterity solely by oral tradition, which has remained even up to the present day the only legitimate way of transmitting the ancient divine knowledge to the future generations of Brahmans. The wonderful state of correctness in which the ancient Vedic texts have reached our time may well excite our admiration, principally if we bear in mind that this is exclusively owing to oral teaching, and not to the use of MSS. Although the Brahmans are at present in the possession of MSS. of their sacred books, they are never used for instruction. The Brahman boy has

to acquire all knowledge of sacred texts from the mouth of a competent and properly qualified teacher, but never from a MS. For according to Brahmanical notions, which are still current, that *Veda* only which is in the mouth of the Brahmans is the true *Veda;* all knowledge of it that has been acquired from MSS. is no longer regarded as *Veda*. The use of them is only permitted in the way of assisting the memory, after the oral instruction has been completed. In former times the aid afforded by MSS. could be more readily dispensed with, since oral instruction took about thirty years, whereas it is now reduced to about half the time. In order to prevent those who had learnt the *Veda* from the mouth of the teacher from ever forgetting what they had committed to memory, it was made incumbent on them to communicate before their death their sacred knowledge to qualified persons. If a Brahman who is in the possession of it should neglect this sacred duty, he is believed to turn, after his death, to a ghost of the worst description, a so-called *Brahmarākshasa*, which belief is still current among the *Mahratta Brahmans*, who are considered as the best preservers of the Vedic tradition in the whole of India. By such means it has been really brought about that the Vedic texts, that is, the *Mantras*, *Brāhmaṇas*, *Upanishads*, and *Vedāṅgas*, rest so firmly in the heads of the professional Vedics, the so-called *Bhaṭṭas*, that if all the MSS. should be collected and destroyed, they could be restored in the very words, even to each single letter and accent, from memory, as I was often assured by trustworthy Brahmans during my six years' stay in the *Mahratta* country. Hence one might justly attribute to texts obtained from a body of renowned Vedics, both in the *Saṅhitā* and *Pada* forms, at least the same degree of accuracy and authority which is ascribed to an edition prepared from a number of the best MSS.; for all really good MSS. have not been copied by the *Bhaṭṭas* from others, but written from memory; errors which may be detected in MSS. are generally not corrected by consulting other copies, but on the authority of the living tradition, viz. one of the *Bhaṭṭas*, since any Vedic text which is written is never looked upon with the same degree of confidence that is attached to oral tradition. The superiority of the latter over all MSS. is also evidenced by the fact that these are not always written in conformity with the rules laid down in the *Prātiśākhyas*, small deviations being tolerated. Had

there been any character of sacredness attached to written copies, as is the case with the Old Testament, where every letter, even its very shape, is regarded as sacred, such a proceeding would be impossible, since there could not exist the slightest difference between the recitation—the rules of which are laid down in the *Śikshās* and *Prātiśākhyas*—and the MSS. On this occasion I may observe that the *Śikshās* and *Prātiśākhyas* teach in fact nothing but the theories for the still existing recitation of Vedic texts, as it must have been in force for at least 2500 years.

Now, if we consider the large number of hymns, sacrificial formulas, liturgical and philosophical speculations, with which the Brahmans had to burden their memory, it is not surprising to find the understanding of the more ancient and difficult parts, such as the hymns, much neglected by them. The character of sacredness being attached to the word and the succession of words as transmitted from times immemorial, their efficacy was always believed to lie in their correct pronunciation, and consequently their meaning was little cared for. I once had occasion to converse with a large number of *Bhaṭṭas*, who are the legitimate preservers of Vedic texts; they told me, to my surprise, that the understanding of the texts they were in the habit of reciting was regarded as perfectly useless, and was consequently wholly disregarded. They learn the *Vedas* by heart for practical purposes, only to recite them at the sacrifices, or before private individuals of the Brahman caste who may wish to hear them for their welfare.

Although this opinion seems to have prevailed with the professional reciters among the Brahmans, it was fortunately not shared by the more intelligent and inquisitive members of their caste, who looked upon the *Bhaṭṭas* as a kind of beasts of burden, carrying loads without knowing their nature. There exists, even up to the present day, a very small class of scholars called *Bhaṭṭāchāryas*, who do not confine themselves to merely committing to memory the sacred texts, but who study their meaning. This class of scholars is, however, not of recent date, but appears to have existed from ancient times. To their exertions alone it is owing that anything about the meaning of the *Vedas*, particularly the hymns, is known in India.

The first traces of attempts at penetrating into the sense of the

hymns are already to be met with in the *Brāhmaṇas* and *Āraṇyakas* or speculations of the Brahmans on the meaning of their prayers, and the sense of the sacrificial rites. Starting from the maxim, that the ceremony which is being performed must be in accordance with the *mantras* and hymns which are recited, they tried to find out some relationship in which the prayer stood to the ceremony. They did not, however, rest satisfied with this, since they wished to know the reasons why such and such a ceremony was performed in such and such a way, but searched for the meaning and sense of the rite and the prayer itself. Though these interpretations are of no scientific value, just as little as the etymologies proposed, they are not quite useless for exegetical purposes, and ought, therefore, to be collected and critically sifted.

As in these Brahmanical interpretations great stress is always laid upon the several words of a passage, or, at least, on some of them, particular care had to be bestowed from the very first on dividing the *mantras* which were recited, under the observation of the euphonical laws, into their respective words. In this way the so-called *Pada* text, in which the several words of the hymns are given separately, irrespective of one another, has been prepared and handed down along with the *Saṅhitā* at a very early period. If we now compare the latter, which is certainly the *textus receptus*, as it proceeded from the mouth of the *Rishis*, with the former, we easily perceive that the *Pada* text is the work of grammarians. As it is, for the most part, very trustworthy, it shows that those who prepared it must have understood a considerable portion of the *mantras;* for had it been otherwise, they would have been unable to divide the continuous texts so well into their several words.

This separation of the connected *Saṅhitā* text into its component words being the first step in the way of a philological interpretation of the Vedic hymns, the Brahmans undertook it chiefly for preserving the several words from corruption, but hardly with a view to laying the foundation for a correct understanding of the Vedic texts. The early descendants of the *Rishis*, the composers of the Vedic hymns, did not care for a minute understanding of every particular in the songs of their forefathers; they rested satisfied with comprehending the general sense, because the language they spoke, which, in its general features, has been preserved to us in the more

ancient *Brāhmaṇas*, did not differ considerably from the idiom of the hymns, due allowance being made for the difference existing in all languages between the poetical and prosaical forms of speech. The only difficult points which needed explanation from the very beginning consisted in the large number of allegorical and mystical expressions with which many hymns are teeming. The meaning of such terms may have been imparted by the composers to their sons; but from the time the *mantras* were made the subject of speculation, they were often neglected, and became consequently obscure. Besides, in the course of time, a good many words, chiefly local and provincial terms, became obsolete, and were no longer understood. In order to preserve the meaning of the most sacred texts on which the influence and power of the whole Brahmanic race was resting, it was deemed expedient to arrange lists of synonymous words, and of such as needed explanation, as well as lists of the different names of gods and divine beings. Two such lists have reached our time; the more important one is the so-called *Nirukta*, which often goes by the name of *Nighaṇṭavas*, being properly confined to the collection of synonymous words. It is taken for one of the six *Vedāṅgas* or auxiliary books for understanding the *Vedas*, but it refers, as it appears, almost exclusively to the *Rigveda*. The other belongs to the *Atharvaveda;* it forms part of its seventy-two *Pariśishṭas*, and contains about the same division as the first one.

Now these lists of words have always been studied, it appears, by certain Brahmanical families from very ancient times, and served as the foundation of an interpretation of Vedic works in India. They were often commented on, but only two of those commentaries have become known, viz. that by *Yāska*, and the other by *Devarāja*, the former flourishing in the fourth or fifth century B.C., the latter in the fifteenth A.D. The principal intermediate commentator was *Skandasvāmī*, whose work has not yet been recovered.

Considering the paramount importance of the *Nirukta*, in its three parts *(Naighaṇṭuka, Naigama,* and *Daivata)*, for the subsequent interpretation of Vedic texts on the part of the Brahmans, their origin must be inquired into. Here, at the very outset, two different opinions may be proposed. Some will be inclined to regard those lists as mere gleanings from speculative works, such as the *Brāhmaṇas*, intermixed with guesses at the meanings of obscure words

from the contents of the hymns; whilst others will look at them as conveying trustworthy explanations, to be traced back to the times of the *Rishis*. They appear, at any rate, to be much anterior to *Yāska*, who distinguishes (Nir. i. 20) three stages regarding the knowledge of the sense of the *mantras* and the rites, viz. the immediate intuitive knowledge on the part of the *Rishis*; the direct and complete communication of it by its possessors to those who did not have it; and; lastly, by the composition of the *Nirukta*, to hand down, piece by piece, the meanings to posterity.

Now this statement made by *Yāska* contains some truth; it shows, as we might naturally expect, that when the Brahmans were no longer able to fully comprehend the meaning of the *mantras*, they first pushed on inquiries after the sense of obscure terms, respecting which in certain families some correct understanding, based on very ancient tradition, could be found, and embodied the results in such lists as we find in the *Nirukta*. Since they contain some remnants of direct and genuine tradition, their authority cannot be so lightly set at nought. If we learn from them, for instance, that *ṛita* is one of the names or epithets of water, that *uparāḥ* is sometimes used in the sense of 'region, direction,' if *vip* is enumerated as one of the appellations for 'finger,' and *brahma* classed with words meaning 'food' and 'wealth,' we cannot without careful inquiry throw such meanings aside. If they cannot be discovered in passages existing, they may have occurred in those which are lost.

Although the collection of synonymous words in the *Nirukta* is of very great value, it is quite insufficient for a full understanding of the Vedic hymns. Since some importance was attached to them, they were naturally commented on. In the work of *Yāska* we still possess an ancient and valuable commentary on some parts of the *Nirukta*, viz. the collection of obscure words and the names of deities. From several indications contained in it, we learn that in his time there existed several schools of interpreters, the more important of which appear to have been the *Nāiruktas*, i.e. exegetes and etymologists, who derived all from verbal roots; *Vaiyākaraṇas*, i.e. analysers, grammarians; and *Yājñikas*, i.e. sacrificial priests, who interpreted all from a liturgical and theological point of view. The opinions of the *Nāiruktas* seem to have been partly preserved to us in *Yāska's* work; for he himself belonged to their number.

Yāska's explanations are chiefly etymological; but there can be no doubt that in his time many words of the Vedic language could be readily understood which became obscure at a later period. Hence great value is to be ascribed to the majority of his interpretations. Though there may be urged a good deal against *Yāska's* etymological proceedings, they are, nevertheless, in many cases, justified by the nature of the Vedic language. Nouns often convey only that meaning, or those meanings, which are implied in the root. One of the most striking instances of this kind is the word *vahni*, which means 'carrier,' from *vah (veho)*, 'to carry,' and can be applied to a horse as the carrier of men, or to fire as the carrier of the sacrifice to the gods; and since the god of fire, *Agni*, is, on account of this service, regarded as a priest, the word may mean 'priest' also. But whatever its meaning may be, it can always be traced to the primitive meaning of the root, which is 'to carry.' Hence a correct etymology is in many cases the only means for arriving at the original sense of the word, which is used in a variety of meanings, seemingly different from one another. There is no doubt that not all the etymologies that have been proposed by *Yāska* can be approved; but even if they are to be rejected, another and more correct one is to be sought after, since this is, chiefly regarding merely poetical words, the only means for arriving at the right sense.

Yāska's work must have enjoyed much celebrity; otherwise it would not have been preserved to us. For many centuries after him Vedic studies appear to have had only a lingering existence until their revival in the eighth century A.D. under *S'aṅkara-āchārya*, who commented on the principal *Upanishads*, which have always been more cared for by the Brahmans than the earlier parts of the Vedas. Although there was no want of Brahmanical scholars, who laboured in the same field of Vedic interpretation, as we may learn from *Devarāja* and the names of commentators mentioned, the only works of importance left to us are the great running commentaries by *Mādhava-āchārya Sāyaṇa Vidyāraṇyasvāmī*,[1] of the fourteenth century, who was the head of the *Vedantins* at *Sringeri* in the South

[1] The identity of *Mādhava-āchārya* and *Sāyaṇa*, who had been taken for two brothers, has been clearly proved by Mr. A. C. Burnell, in his valuable introduction to the *Vaṁśabrāhmaṇa*.

of India. They extend over the *Rig-*, *Yajur-*, and *Sāmavedas*, and their respective *Brāhmaṇas*, and may be justly regarded as the most complete exegetic work on the *Vedas* which exists at present, and will exist for many years to come. He enjoyed the special favour of King *Bukka*, under whose reign he flourished, and he is still held in the highest esteem by the Brahmans. The interpretations given by him are only partly his own; he embodies the opinions of other Vedic scholars, without mentioning their names, except *Yāska's*, as is frequently the custom with Hindu scholars. Sometimes he alludes to the opinions of *Āchārya* in general. The foundation on which the whole work of *Sāyaṇa* has been built up is the *Nirukta* and *Yāska's* commentary on it. Being himself thoroughly acquainted with all departments of Brahmanical theology, philosophy, and Sanskrit grammar, he brought to bear all this vast knowledge on the elucidation of the *Vedas*. As all the principal Vedic sacrifices were in use in his time (and are so even now-a-days), he could easily obtain from the *S'rotriyas*, or sacrificial priests, the explanation of many a ritual term which would otherwise have remained dark. Thus his work may be justly regarded as the great storehouse of what India produced in the line of Vedic interpretation, showing us how the *Vedas* have been understood by the Brahmans during more than two thousand years.

Now the principal question arises: Does *Sāyaṇa's* work represent the uninterrupted chain of traditional interpretation from the most ancient times, or only the results of Brahmanical scholarship which was brought to bear on the *Vedas* to comprehend their meaning which had been lost altogether? To be just and impartial, we can neither wholly affirm the first nor the second question. If anybody might be inclined to believe, as has been really the case, that *Sāyaṇa* gives us everywhere that sense of the Vedic hymns which the *Rishis* had recorded in them, such an opinion could be easily refuted by merely adverting to the fact that in many cases *Sāyaṇa* proposes several explanations of the same passage, or of a particular word. Since a word can never have had two or more meanings in a particular passage, except it be a pun, it is evident that he propounds in such cases different opinions of various scholars, including his own. No doubt a large proportion of the interpretations to be found in his work is nothing but the result of Brahmanical scholarship;

but at the bottom of the whole there lies a remnant of ancient tradition, part of which we have seen embodied in the *Nirukta*.

From all this we may conclude that the value of *Sāyaṇa's* commentaries must be very great, as we learn from them the opinions of the greatest divines and scholars of Hindustān on the sense of the Vedic hymns. Although we may have in many instances good reasons to doubt the soundness and correctness of their views regarding the sense of obscure passages, in which the Vedic songs abound, we find them very trustworthy guides in the interpretation of the *Brāhmaṇas*, principally as far as the explanation of sacrificial terms is concerned, since they were partly performers of Vedic sacrifices themselves, or had, in their capacity of *Agnihotris*, performed them on their behalf.

For Europe, the *Veda* has been a sealed book until very lately. It is true, *Henry Thomas Colebrooke*, who fully deserves the honour of being regarded as the greatest European Sanskrit scholar who has lived as yet, has given us already, towards the beginning of this century, the first trustworthy information on the *Vedas* and their contents from original sources; but owing to the great difficulties offered by the Vedic idiom, and the peculiar nature of the contents of the *Vedas*, it took about thirty years before another scholar ventured upon translating a larger portion of the ancient hymns, which form the most important and interesting part of the *Vedas*. It was *Frederic Rosen* who had the great courage to undertake, solely aided by *Sāyaṇa*, the translation of the first 121 hymns of the *Rigveda;* but his premature death prevented that enterprising scholar from continuing and finishing his highly important work, which, however, served other scholars in Europe as the key to unlock the treasures of primitive Indian thoughts. Now quite a rush was made upon the *Veda;* each wanted to be first in the field. Since, in consequence of his labours, *Sāyaṇa's* commentary was prominently brought forward as the only means for disclosing the hidden sense of the Vedic hymns, the publication of this gigantic work was deemed an absolute necessity for the furtherance of Vedic studies. It is, therefore, highly creditable to the late Court of Directors, that they provided the means for its publication, and entrusted the edition of it to the able hands of *Max Müller*, which I am glad to learn has now, after the lapse of 25 years, been completed. During

this time great activity has been displayed everywhere in Vedic research; most of the Vedic works were not only published, but even attempts were made to explain them in perfect independence of Brahmanical tradition and commentaries. Even long before *Sāyaṇa* could be placed in a correct and readable form in its entirety in the hands of scholars, he was declared by some a wholly unsafe guide, who was not worth the trouble of having many years and much money spent on being edited. The main argument brought against him was, that he was only a scholastic interpreter, who does not give the true sense of the hymns, which had been entirely lost to the Brahmans, presenting to us either his own views or those of other Brahmanical scholars who do not deserve any more credit.

Instead of determining the meaning of words by appeal to the *Nirukta*, or to ancient customs and rites or etymology, the principal stress was now laid on the comparison of parallel passages in which the same word or phrase occurs. The proceeding adopted by those who advocated an independent interpretation was as follows. They first collected all the passages in which a particular word and phrase occurred; then they tried, in most cases without any reference to *Sāyaṇa's* interpretation, or any other Indian authority, to determine the meaning by guessing at it from the general context or sense of the passage or verse, as far as they believed they understood it; if the sense arrived at in this manner appeared to suit all the passages compared, they thought they had settled the meaning. Particular care, however, was taken to explain correctly the grammatical forms.

Notwithstanding the comparison of parallel passages being a powerful help towards clearing up obscurities which are by no means to be neglected, as is generally done by the native commentators, its importance must not be overrated. Its application, principally in the Vedic hymns, is not always a safe way to arrive at trustworthy results. The main difficulty here is, that the hymns, the parallel passages of which are compared, are neither of the same age, nor of the same poet, nor did they originate at the same localities, nor under the same circumstances. Now it is self-evident that one and the same word could change its meaning at different periods, or was used in a different sense by different poets, or at different places; we cannot help admitting that there are a good many expressions

which were peculiar to certain localities or periods or poets. Such words are often better explained by a sound etymology than by the comparison of parallel passages, by which quite disparate meanings may be thus intermingled. Besides, a large number of Vedic hymns has been composed only for sacrificial purposes, and even for special rites, in which many a word has a technical meaning; whereas others are allegorical and mystical, in which many words are not to be taken in their natural, but in a merely figurative sense. For settling the meanings of words in such hymns, a mere comparison of parallel passages taken at random from any place is also insufficient.

The remarks I have made here on the comparison of parallel passages are not meant to discredit their application, but only to caution against regarding them as the only means for solving all difficulties in the Vedic hymns. I am not, however, the first to raise doubts as to the infallibility of this method, for this had been already done by such an eminent Sanskrit scholar as the late *Theodor Goldstücker*, whose untimely death is to be deeply deplored.

The real merits of this method, just as those of any other, are best tested by the results produced. The first the interpreter of a difficult passage must aim at is to make out a clear sense; if the translation proposed be obscure, or defies even all common sense, its correctness is questionable from the very first. But even if it prove to be clear and intelligible, it is by no means the only sure test that the translator has hit on that sense which was originally intended by the author. We cannot pronounce a translation to be correct before we are fully satisfied with the manner by which the meaning has been arrived at, that is, before all grammatical and lexicographical difficulties have been cleared away and satisfactorily explained. Hence no translation of difficult hymns or verses can be accepted, if it be not accompanied with a commentary, in which respect Max Müller has made a good beginning in his notes on twelve hymns addressed to the Storm-gods. If an unintelligible rendering of Vedic passages is almost a sure test of its incorrectness, there is, on the other hand, a translation which tallies thoroughly with our modern ideas, and reads like a modern song, no longer the expression of the thoughts of the ancient *Rishis*. It must be in thorough

accordance with the notions and conceptions of the Vedic age, and society in general, the nature of the country in which they originated, and the views of the respective poets in particular. In this respect a modern Hindu interpreter is surely in a better position than a European one; for he does not only know his country, its climate, etc., better, but he moves in a society and practises a religion and customs which have grown out of the shoots and sprouts of the Vedic age; whereas our modern civilization has its roots in Hellas, Rome and Palestine—Hindu and Christian civilization have nothing in common. Besides, a Hindu interpreter has a great advantage over every European interpreter, in the important fact that in some parts of India, especially in the *Mahratta* and *Guzerat* countries, the Vedic form of worship, which almost exclusively consists in a series of sacrifices, is still extant, and practised up to the present day by the so-called *Agnihotris*. This enables him to explain a good many expressions occurring in the hymns with certainty at once; whilst the European interpreter has nothing to offer but vague guesses regarding most words that refer to sacrificial matters.

Now, if translations of Vedic hymns made in Europe were tested by the application of all those helps which a Hindu, or even a European residing in India under certain circumstances may enjoy, the apparently clear sense arrived at by guessing at the meaning under comparison of a certain number of parallel passages often proves to be a mere illusion; for in many cases the modern and Christian ideas of the interpreters creep in and alter the original sense. When epithets of the Vedic gods, such as *dhiyāvasu*, are interpreted as meaning 'devout,' or 'rich in devotion,' then we cannot look upon such a rendering as the adequate expression of the thoughts of the *Rishis*, since no Hindu has ever viewed his gods in this light from the most ancient times down to the present. When we are further told that the original meaning of the word *brahma* was 'devotion,' then this assumption rests only on a misapprehension of Brahmanical ideas and the nature of Vedic sacrifices; for anything like what we Christians call 'devotion' was strange to the Brahmanical mind in ancient India, the earliest traces of such a notion being found in the worship of *Kṛishṇa*, which no one will trace to Vedic sources. In the same manner it is just as little in accordance with Hindu conceptions to interpret the common Sanskrit

word *punya* as conveying the sense of 'morally good,' or 'righteous,' since our idea of righteousness or goodness is strange to the Hindu mind.

However, the Christian notions which those modern interpreters who scorn native commentaries and information obtained from Brahmanical priests principally import into the Vedas, are not the only source of their shortcomings; for others proceed from a somewhat imperfect acquaintance with Indian rites, customs, and sacrifices. When they believe, for instance, that *Vedi* is something like our altar, and *Veda* a kind of broom for sweeping it, one has only to look at both to see that the *Vedi* is a hole with slightly elevated walls of clay strewn over with *Kuśa-grass*, and the *Veda* a small bunch of such grass tied together, which is far too small to be used for sweeping the so-called altar, on which, however, the grass must remain as long as the sacrifice lasts.

Besides, the difficulties of such interpreters as rely upon their powers of conjecture as the principal source of information are often increased by the very simple fact that a good many meanings said to be exclusively Vedic, with which the dictionary is enriched, cannot be reconciled in any way with the sense attributed to the same word in good and trustworthy native vocabularies and the classical Sanskrit literature. When the meaning of a word occurring in the Vedas differs from that attached to it in the common Sanskrit language, which is frequently enough the case, then a connecting link must be sought for to show how the later sense was developed out of the earlier one. Thus the word *makha*, 'sacrifice,' is said to mean 'merry,' 'gay,' in certain passages of the hymns; but as there cannot be shown in any reasonable manner how the meaning of 'sacrifice' originated out of that of 'merry,' the latter is doubtful from the very first, and proves more so on further examination of the passages.

Although the results arrived at by the independent interpreters prove in many cases not more, in some even less, satisfactory than those obtained by the Hindu scholars, they are very valuable in other respects. As they carry on their researches in a more methodical way, and bring to bear on them their philological training and acquaintance with comparative philology, difficult grammatical forms and complicated syntactical constructions are often better explained

by them than by the native commentators, who entirely depend upon *Pāṇini* for their grammatical knowledge.

Notwithstanding all that has been achieved as yet by Hindu and European interpreters, we are still far from being able to understand the Vedic hymns as well as we do the Psalms and the songs of Homer. If Vedic interpretation is to make any progress, it will be indispensable to write thorough commentaries on a suite of hymns like those which we possess on the Psalms and the Prophets. All those interpretations that have as yet been stored up in dictionaries are nothing but first attempts at deciphering the Vedic hymns, but not the decipherment itself.

Though the difficulties to be surmounted be far greater than most people think, there is, however, some hope that we may, in the end, by the application of all the helps that Brahmanical scholarship, the still existing rites and comparative philology can afford, arrive at that sense which the *Rishis* recorded in their songs and prayers, opening thus fully up the rich mine of the most primitive thoughts of the whole Aryan race.

WHO WROTE THE RAGHUVAṂŚA, AND WHEN?

By SHANKAR PANDURANG PANDIT.

Doubts have been raised whether Kâlidâsa the author of the Raghuvaṁśa is identical with that Kâlidâsa who composed the dramas and the poems of Kumârasambhava and Meghadûta. Dr. Weber, in his very learned essay on the Râmâyaṇa, thinks that "there is at least some amount of doubt whether we are right in ascribing it (the Raghuvaṁśa) to the author of the dramas and of the Meghadûta." I propose here to show that there exists no doubt that the Raghuvaṁśa is the production of the great Kâlidâsa. In the first place, I may observe that no one in India has up to this time entertained any doubt as to the great poet's authorship of that poem. On the contrary, the tradition handed down from one generation of scholars to another for many centuries is that the same author that composed the dramas also composed the poems. One form in which the tradition has existed, and exists to this day, is the very large number of commentators, who, writing in different centuries and in different places, all ascribe the work to the great poet Kâlidâsa—*Mahâkavi-Kâlidâsa*. I have come across no less than nine of these commentaries, and not one of them has a doubt as to who was the author of the poem on which they comment. Of these, one gives his

date, viz. *Dinakara*,[1] to be Saṁvat 1441, or A.D. 1385. And though the dates of some of the others are not known with precision, there are very weighty grounds for my holding that one of them, *i.e.* Châritravardhana, was the source from which Dinakara borrowed wholesale in compiling his commentary. This Châritravardhana must, therefore, be placed considerably prior to the date of Dinakara, and that would take us back to the thirteenth and possibly to the twelfth century. Neither Dinakara nor Châritravardhana are, however, the oldest commentators we know of on the Raghuvaṁśa. Both refer to older commentators in numerous places, and sometimes refute and sometimes follow them. Châritravardhana names *Vistarakâra* and *Kṛishṇabhaṭṭa*, and Dinakara names *Kṛishṇabhaṭṭa* among those they refer to. That a large number of older commentaries existed in the time of Dinakara, *i.e.* nearly 500 years ago, is stated by Dinakara himself, who says in his *Introduction*, that "although there already exist various commentaries on the poem, nevertheless, as he hopes to show a difference in interpretation, he therefore takes the trouble of writing a new one."[2] The references to older commentators in Châritravardhana are even more numerous than in Dinakara. Now if these, or any of these various commentators who preceded *Dinakara* and *Châritravardhana*, had attributed the poem to a Kâlidâsa other than the great Kâlidâsa of the dramas, Dinakara or Châritravardhana would certainly have noticed the fact, and would have even refuted the ascription before themselves ascribing it in the clearest possible terms to the great Kâlidâsa. "To write a commentary," says Dinakara, "on the Raghuvaṁśa, is for me, a humble man of human abilities, to aspire to the glory of learned men. May, therefore, the Goddess of Speech confer her favour upon me." The following shows in what estimation Dinakara holds Kâlidâsa, the author of the Raghuvaṁśa: "The light," says he, "of the moon excites the ocean though inanimate. In the same strange manner

[1] वर्षेस्मिन्वैक्रमार्के शशियुगमनुभिश्चिह्निते सूक्तिमुक्तां टीकामेतां सुबोधां व्यतनुत कमलाकुचिजन्मा दिनेशः।

[2] यद्यपि सन्ति विचित्राष्टीकाबन्धास्तथापि कुत्रापि।
एषा विशेषजननी भविष्यतीति श्रमो मेत्र॥

the poetry of Śrî Kâlidâsa enriches my mind with the wealth of light." [1]

We have then the distinct statement of Mallinâtha, in his Introduction to his commentary on the Raghuvaṁśa, that "he has undertaken to write commentaries on the entire three Kâvyas of Kâlidâsa," where the words **व्याचष्टे कालिदासीयं काव्यत्रयम्** are more definite than **कालिदासस्य त्रीणि काव्यानि** would have been, and appear to me to mean "*the* well-known three Kâvyas of Kâlidâsa." Mallinâtha hereby assigns the Raghuvaṁśa, the Kumârasambhava, and the Meghadûta to Kâlidâsa. To Mallinâtha there is no doubt who that Kâlidâsa was. It was, namely, that Kâlidâsa,[2] "the real purport of whose poetry is known to Kâlidâsa alone, or to the goddess Sarasvatî, or to the four-mouthed god Brahmâ himself, but not to others like me." Now the age of Mallinâtha has not yet been ascertained with certainty. The late Dr. Bhau Dâjî opines that "he lived some time after the fourteenth century." This limit is probably correct, as he quotes the *Haimakośa*. At the same time, he can hardly be much later, as MSS. of his commentaries are met with in India as old as three and four centuries. Mallinâtha refers in numerous places to older commentators, and names especially *Nâtha* and *Dakshiṇâvarta*, who are both referred to under their names by Dinakara and Châritravardhana also. Now if either *Nâtha* or *Dakshiṇâvarta* had attributed the Raghuvaṁśa to a Kâlidâsa other than the great one, Châritravardhana, Dinakara, or Mallinâtha would have noticed the fact.

We have thus a tradition, more than six or seven centuries old, that the Raghuvaṁśa is the work of the great Kâlidâsa—a tradition that does not recognize another Kâlidâsa.

That the Raghuvaṁśa and the Kumârasambhava were composed

[1] यशांसि लिप्सुर्विदुषां विधित्से महानिबन्धं नरधीरधीरः।
देयादतो वागधिदैवतं मे सदुक्तिमुक्ताः करणैकधाम॥
सौधाकरैकिरणा वलिरम्बुराशिमुल्लासयत्यतिजडं विपरीतमेतत्।
श्रीकालिदासकवितैव परं मनो मे वैदुष्यसंपदमलं विपुलीकरोति।
Introduction 3, 4.

[2] कालिदासगिरां सारं कालिदासः सरस्वती।
चतुर्मुखोथवा साक्षाद्विदुर्नान्ये तु मादृशाः॥
Introduction 6.

by the same Kâlidâsa we are told both by Dinakara and by Châritravardhana, who, while commenting on Ragh. vii. 15, and referring to the eleven stanzas that precede it, observe, "Though these stanzas are also found in the Kumârasambhava, nevertheless, as they are intended to show that the same author wrote both the poems, no blemish attaches to the fact." [1]

But the internal evidence from both the three poems, as also the dramas, tending to prove their common origin, is so abundant that we cannot escape the conclusion that either one and the same author wrote them all, or that there were two individuals in one living in the same place at different times. For it is impossible to suppose that a plagiarist who had borrowed wholesale from an extensively read, most celebrated, and generally admired author, who feigned his master's modesty, copied his thoughts, expressions, virtues, and defects, was able so far to impose upon a host of keen-sighted critics, that they were unable to see him in his proper light, and regarded his productions as those of his master whom he had robbed, and quoted them as models of correctness, elegance, beauty, and originality in their treatises on glossaries, poetry, and drama.

To the readers of the three works—the Raghuvaṁśa, the Kumârasambhava, and the Meghadûta—the same unaffected simplicity of expression, the same lively imagination, the same richness of illustration, the same fondness for the scenery of the Himâlaya, the Vindhya, and the banks of the Ganges, the same love of dwelling upon the peacefulness of rural and hermitage life, the same fondness for field sports, the same intimate acquaintance with court life, that prevail throughout them, is so striking that certain passages require only to be put side by side to show their common origin. The analogies between the dramas and the poems are necessarily fewer than those between the poems themselves, owing to the difference between the kinds of composition of the poems and the dramas. But as far as this difference can admit of analogies, these are quite numerous and characteristic of Kâlidâsa. Between the Raghuvaṁśa containing nineteen cantos of verse, and the Śâkuntala consisting of

[1] यद्यपीते श्लोकाः कुमारसंभवेपि सन्ति तथाप्यत्रैककर्तृत्वद्योतनायोक्तत्वान्न दोषः Dinakara *ad loc.* यद्यपीते श्लोकाः कुमारोत्पत्तावपि विद्यन्ते तथाप्येककर्तृकत्वान्न दोषः Châritravardhana *ibid.*

seven acts, of which the greater part is prose, there cannot be much that is analogous. The necessity of confining himself to the story of love of one man and his mistress in the dramas affords little latitude to the poet to indulge in dwelling upon some of his favourite ideas. But where such scope is afforded, as, for instance, in the two poems of Raghuvaṁśa and Kumârasambhava, the analogous and even identical passages are quite numerous—perhaps too numerous. So also where between one drama and another the analogies may be expected to be greater than between a drama and a Kâvya, the Śâkuntala, the Vikramorvaśî, and the Mâlavikâgnimitra fully answer the expectation.

The repetition of thought and expression being therefore conspicuous throughout the poems and the dramas, and the theory of plagiarism being untenable, because of their having been quoted for many centuries as works of the same Kâlidâsa, it only remains to admit their common origin.

Let us see what analogies the Kumârasambhava presents to the Raghuvaṁśa. We will first quote some of the passages, where the analogy or identity is at once striking, and then refer to such as, though analogous, nevertheless differ in their expression.

Raghuvaṁśa.	Kumârasambhava.
वागर्थाविव संपृक्तौ वागर्थप्रतिपत्तये। जगतः पितरौ वन्दे पार्वतीपरमेश्वरौ॥ i. 1.	तमर्थमिव भारत्या सुतया योक्तुमर्हसि। * * * यावन्त्येतानि भूतानि * * मातरं कल्पयन्त्येनामीशो हि जगतः पिता vi. 79, 80.
सा दुष्प्रधर्षा मनसापि हिंस्रैः ii. 27.	पश्यन्नदूरान्मनसाप्यधृष्यम् iii. 51.
सकाङ्कुलिः सायकपुङ्ख एव चित्रार्पितारम्भ इवावतस्थे *ib.* 31.	तच्छासनात्काननमेव सर्वम् चित्रार्पितारम्भमिवावतस्थे iii. 42.
भोगीव मन्त्रौषधिरुद्धवीर्यः *ib.* 32.	मन्त्रेण हृतवीर्यस्य फणिनो दैन्यमाश्रितः ii. 21.
उपस्थिता शोणितपारणा मे *ib.* 39.	विरोधिनां शोणितपारणैषिणीम्। गदाम् xiv. 11.

दिशः प्रसेदुर्मरुतो ववुः सुखाः प्रदक्षिणार्चिर्हविरग्निराददे। iii. 37.

वाता ववुः सौख्यकराः प्रसेदुराशाविधूमो ऋतभुग्दिदीपे xi. 37.

तमङ्कमारोप्य शरीरयोगजै· *ib.* 26.

स्वमङ्कमारोप्य सुधानिदानम् xi. 22.
तमङ्कमारोप्य सुता हिमाद्रेः xiii. 4.

विवाहदीक्षां निरवर्तयद्गुरुः *ib.* 33.

विवाहदीक्षाविधिमन्वतिष्ठत् vii. 1.
विवाहदीक्षातिलकं चकार *ib.* 24.

स्फुरत्प्रभामण्डलमस्त्रमाददे *ib.* 60.

स्फुरत्प्रभाभासुरमण्डलैस्तैः xiii. 7.

स्फुरत्प्रभामण्डलमध्यवर्ति v. 51.

स्फुरत्प्रभामण्डलयोः समन्तात् xii. 12.

स्फुरत्प्रभामण्डलमानुसूयम् xiv. 14.

स्फुरत्प्रभामण्डलया चकाशे i. 24.

छायामण्डललक्ष्येण तमदृश्या किल स्वयम्।
पद्मा पद्मातपत्रेण भेजे * * iv. 5.

तयोरुपर्यायतनालदण्डम्
आधत्त लक्ष्मीः कमलातपत्रम् vii. 89.

रजोभिः स्यन्दनोद्धूतैर्गजैश्च घनसंनिभैः।
भुवस्तलमिव व्योम कुर्वन्व्योमेव भूतलम् *ib.* 29.

कोलाहलेनोच्छलता दिवौकसां
महाचमूनां गुरुभिर्ध्वजव्रजैः।
घनैर्निरुच्छ्वासमभूदलंतरां
दिङ्मण्डलं व्योमतलं महीतलम् xiv. 16.

शशंस तुल्यसत्त्वानां सैन्यघोषेष्यसंभ्रमम्।
गुहाशयानां सिंहानां परिवृत्यावलोकितम् *ib.* 72.

महाचमूनां करिचण्डचीत्कृतैः
* *
सुरेन्द्रशैलेन्द्रमहागुहाशयाः
सिंहा महास्वप्नसुखं न तत्यजुः xiv. 26.

नक्षत्रतारागृहसंकुलापि
ज्योतिष्मती चन्द्रमसैव रात्रिः vi. 22.

नक्षत्रतारागृहमण्डलानाम्
इव त्रियामारमणो नभोन्ते xiii. 8.

अध्यास्य चाश्मःपृषतोक्षितानि
शैलेयगन्धीनि शिलातलानि *ib.* 51.

मनःशिलाविच्छुरिता निषेदुः
शैलेयनद्धेषु शिलातलेषु i. 55.

रिपुश्रियां * *
वन्दीकृतानामिव * *ib.* 55.

प्रत्यानेष्यति शत्रुभ्यो वन्दीमिव जयश्रियम् ii. 52.

ऐरावतास्फालनविश्रमं यः संघट्टयन्नङ्गदमङ्गदेन *ib.* 73.	ऐरावतास्फालनकर्कशेन हस्तेन पस्पर्श तदङ्गमिन्द्रः iii. 22.
ततस्तदालोकनतत्पराणां सौधेषुचामीकरजालवत्सु । बभूवुरित्थं पुरसुंदरीणां त्यक्तान्यकार्याणि विचेष्टितानि vii.5.	तस्मिन्मुहूर्ते पुरसुन्दरीणाम् ईशानसंदर्शनलालसानाम् । प्रासादमालासु बभूवुरित्थं त्यक्तान्यकार्याणि विचेष्टितानि vii. 56.
आलोकमार्गं सहसा व्रजन्त्या कयाचिदुद्वेष्टनवान्तमाल्यः । बद्धुं न संभावित एव तावत् करेण रुद्धोपि हि केशपाशः ॥ *ib.* 6.	आलोकमार्गं सहसा व्रजन्त्या कयाचिदुद्वेष्टनवान्तमाल्यः । बद्धुं न संभावित एव तावत् करेण रुद्धोपि हि केशपाशः ॥ vii. 57.

As the five stanzas from vii. 7 to 11 are identical with Kumârasambhava vii. 58 to 62, I do not quote them. Raghuvaṁśa vii. 12 is also *mutatis mutandis* the same as Kumârasambhava vii. 64, thus:—

Raghuvaṁśa.	Kumârasambhava.
ता राघवं दृष्टिभिरापिबन्त्यो नार्यो न जग्मुर्विषयान्तराणि । तथा हि शेषेन्द्रियवृत्तिरासां सर्वात्मना चक्षुरिव प्रविष्टा ॥	तमेकदृश्यं नयनैः पिबन्त्यो नार्यो न जग्मुर्विषयान्तराणि । तथा हि शेषेन्द्रियवृत्तिरासां सर्वात्मना चक्षुरिव प्रविष्टा ॥

The verses that follow are also nearly identical.

स्थाने वृता भूपतिभिः परोक्षैः स्वयंवरं साधुममंस्त भोज्या । पद्मेव नारायणमन्यथासौ लभेत कान्तं कथमात्मतुल्यम् vii. 13.	स्थाने तपो दुश्चरमेतदर्थम् अपर्णया पेलवयापि तप्तम । या दाक्षमप्यस्य लभेत नारी सा स्यात्कृतार्था किमुताङ्गशय्याम् vii. 65.
परस्परेण स्पृहणीयशोभं न चेदिदं द्वन्द्वमयोजयिष्यत् । अस्मिन्द्वये रूपविधानयत्नः पत्युः प्रजानां वितथोभविष्यत् ॥ *ib.* 14.	परस्परेण स्पृहणीयशोभं न चेदिदं द्वन्द्वमयोजयिष्यत् । अस्मिन्द्वये रूपविधानयत्नः पत्युः प्रजानां विफलोभविष्यत् ॥ *ib.* 66.

दृत्युद्गताः पौरवधूमुखेभ्यः	दृत्योषधिप्रस्थविलासिनीनां
शृण्वन्कथाः श्रोत्रसुखाः कुमारः ।	शृण्वन्कथाः श्रोत्रसुखास्त्रिनेत्रः ।
उद्भासितं मङ्गलसंविधाभिः	केयूरचूर्णीकृतलाजमुष्टिं
संबन्धिनः सन्न समाससाद ॥ *ib.* 16.	हिमालयस्यालयमाससाद ॥ *ib.* 69.
आसद्विरः कण्टकितप्रकोष्ठः	रोमोद्गमः प्रादुरभूदुमायाः
स्विन्नाङ्गुलिः संवृते कुमारी ।	स्विन्नाङ्गुलिः पुंगवकेतुरासीत् ।
वृत्तिस्तयोः पाणिसमागमेन	वृत्तिस्तयोः पाणिसमागमेन
समं विभक्तेव मनोभवस्य ॥ *ib.* 19.	समं विभक्तेव मनोभवस्य ॥ *ib.* 77.
तयोरपाङ्गप्रतिसारितानि	तयोः समापत्तिषु कातराणि
क्रियासमापत्तिनिवर्तितानि ।	किंचिद्व्यवस्थापितसंहृतानि ।
ह्रीयन्त्रणामानशिरे मनोज्ञाम्	ह्रीयन्त्रणां तत्क्षणमन्वभूव-
अन्योन्यलोलानि विलोचनानि ॥ *ib.* 20.	न्नन्योन्यलोलानि विलोचनानि ॥ *ib.* 75.
प्रदक्षिणप्रक्रमणात्कृशानोर्	प्रदक्षिणप्रक्रमणात्कृशानोर्
उदर्चिषस्तन्मिथुनं चकासे ।	उदर्चिषस्तन्मिथुनं चकाशे ।
मेरोरुपान्तेष्विव वर्तमानम्	मेरोरुपान्तेष्विव वर्तमानम्
अन्योन्यसंसक्तमहस्त्रियामम् ॥ *ib.* 21.	अन्योन्यसंसक्तमहस्त्रियामम् ॥ *ib.* 79.
हविःशमीपल्लवलाजगन्धी	सा लाजधूमाञ्जलिमिष्टगन्धं
पुण्यः कृशानोरुदियाय धूमः ।	गुरूपदेशाद्ददनं निनाय ।
कपोलसंसर्पिशिखः स तस्या	कपोलसंसर्पिशिखः स तस्या
मुहूर्तकर्णोत्पलतां प्रपेदे ॥ *ib.* 23.	मुहूर्तकर्णोत्पलतां प्रपेदे ॥ *ib.* 81.
तदञ्जनक्लेदसमाकुलाक्षं	तदीषदार्द्रारुणगण्डलेखम्
प्रस्थानबाष्पाङ्कुरकर्णपूरम् ।	उच्छ्वासिकालाञ्जनरागमक्ष्णोः ।
वधूमुखं पाटलगण्डलेखम्	वधूमुखं क्लान्तयवावतंसम्
आचारधूमग्रहणाद्बभूव ॥ *ib.* 24.	आचारधूमग्रहणाद्बभूव ॥ *ib.* 82.
कन्याकुमारौ कनकासनस्थौ	जायापती लौकिकमेषणीयम्
आर्द्राक्षतारोपणमन्वभूताम् *ib.* 25.	आर्द्राक्षतारोपणमन्वभूताम् ॥ *ib.* 88.

The passages here given occur while the poet describes the celebration of a marriage and the performance of the ceremonies connected therewith.

The following are selected from a description of a battle, attention having already been drawn to some of them by Viṭṭhal Sâstrî[1] of Banâras:—

पत्तिः पदातिं रथिनं रथेशस् तुरंगसादी तुरगाधिरूढम् । यन्ता गजस्याभ्यपतद्गजस्थं vii. 34.	पत्तिः पत्तिमभीयाय रणाय रथिनं रथी । तुरंगस्थं तुरंगस्थो दन्तिस्थं दन्तिनि स्थितः xvi. 2.
विलोलघण्टाक्वणितेन नागः *ib.* 38.	विलोलघण्टाक्वणितोपबृंहितैः vii. 26. विलोलघण्टारणितै रणोल्बणैः *ib.* 41.
पूर्वं प्रहर्ता न जघान भूयः प्रतिप्रहाराक्षममश्वसादी । तुरंगमस्कन्धनिषण्णदेहं प्रत्याश्वसन्तं रिपुमाचकाङ्क्ष ॥ *ib.* 44.	धन्विनस्तुरगारूढा गजारोहाञ्शरैः क्षतान् । प्रत्यिच्छन्मूर्च्छितान्भूयो योद्धुमाश्वसतश्चिरम् xvi. 35. न रथी रथिनं भूयः प्राहरच्छस्त्रमूर्छितम् । प्रत्याश्वसन्तमन्विच्छन्नागमद्युद्धलोभतः *ib.* 44.
कश्चिद्विषत्खड्गहृतोत्तमाङ्गः सद्यो विमानप्रभुतामुपेत्य । वामाङ्गसंसक्तसुराङ्गनः स्वं नृत्यत्कबन्धं समरे ददर्श ॥ *ib.* 48.	मिथोर्धचन्द्रनिर्लूनमूर्धानौ रथिनौ रुषा । खेचरौ भुवि नृत्यन्तौ स्वकबन्धावपश्यताम् ॥ *ib.* 46.
परस्परेण क्षतयोः प्रहर्त्रोर् उत्क्रान्तवाख्योः समकालमेव । अमर्त्यभावेपि कयोश्चिदासीद् एकाप्सरःप्रार्थितयोर्विवादः ॥ *ib.* 50.	अन्योन्यं रथिनो कौचिद्गतप्राणौ दिवं गतौ । एकामप्सरसं प्राप्य युयुधाते वरायुधौ ॥ *ib.* 45.

Wherever the poet gets an opportunity to manifest his identity, as, for instance, when he comes to describe similar incidents, he rarely ever disappoints our expectations to meet with analogous illustrations.

[1] The *Pandit*, vol. i. no. 10, pp. 141, 142.

Here he is, in one place making the husband mourn the death of his wife, and in another the wife that of her husband:

Raghuvaṁśa.	Kumârasambhava.
अथवा मम भाग्यविप्लवाद्	विधिना कृतमर्धवैशसं
अशनिः कल्पित एष वेधसः।	ननु मां कामवधे विमुञ्चता।
यदनेन न पातितस्त्वरुः	अनपायिनि संश्रयद्रुमे
चपिता तद्विटपाश्रया लता ॥ viii.46.	गजभग्ने पतनाय वल्लरी ॥ iv. 31.
कृतवत्यसि नावधीरणाम्	कृतवानसि विप्रियं न मे.
अपराद्धेपि यदा चिरं मयि।	प्रतिकूलं न च ते मया कृतम्।
कथमेकपदे निरागसं	किमकारणमेव दर्शनं
जनमाभाष्यमिमं न मन्यसे ॥ *ib.* 47.	विलपन्त्यै रतये न दीयते ॥ *ib.* 7.
नवपल्लवसंस्तरेपि ते	अमुनैव कषायितस्तनी
मृदु दूयेत यदङ्गमर्पितम्	सुभगेन प्रियगात्रभस्मना।
तदिदं विषहिष्यते कथं	नवपल्लवसंस्तरे यथा
वद वामोरु चिताधिरोहणम् ॥ *ib.* 56.	रचयिष्यामि तनुं विभावसौ ॥ *ib.* 34.
विससर्ज कृतान्त्यमण्डनाम *ib.* 70.	क्रियतां कथमन्त्यमण्डनम्। *ib.* 22.

Who that compares the description of spring in canto ix. 24, 27, of the Raghuvaṁśa, with that in the third canto of the Kumârasambhava 25-39, will fail to observe such an analogy between them as can only be explained if their author is the same? But I feel I have quoted quite a sufficient number of passages, which will, I think, convince any one of the identity of the author of the two[1] poems. If further evidence be still required, there is much of it in the tenth canto of the Raghuvaṁśa, where there occur several stanzas in the prayer of the gods to Vishṇu which are almost identical with some in a similar prayer addressed on a similar occasion to Brahmâ in the second canto of the Kumârasambhava. Compare, for instance, stanza 16 with Kum. ii. 16; 20 and 24 with 9; 25 with 13; 33 with 16; 36 with 17; 45 with 46; 46 with 45; 47 with 61; 48 with 62.

It is no exaggeration to say that there are other verses in the

[1] Compare particularly Raghu. ix. 26 with Kum. ii. 25, Raghu. ix. 35 with Kum. iii. 54, Raghu. ix. 57 with Kum. iii. 32.

two poems too numerous to quote here, the striking similarity of which admits of no other explanation than that they proceeded from one and the same author. As some of them are noteworthy, I will quote a few of them here. Speaking of Mathurâ, founded by Śatrughna, the poet says (xv. 29), **स्वर्गाभिष्यन्द्वमनं क्षत्रेवोपनिवेशिता**, a description into which he unconsciously glides when describing in the sixth canto of the Kumârasambhava the city of Oshadhiprastha (v. 37), **अलकामतिवाह्यैव वसतिं वसुसंपदाम्। स्वर्गाभिष्यन्द्वमनं क्षत्रे-वोपनिवेशितम्**. The following verses, lamenting the state of the pillars and windows of the houses of deserted Ayodhyâ and the city of the Gods, differ but slightly:

स्नभेषु योषित्प्रतियातनानाम्
उत्क्रान्त वर्णक्रमधूसराणाम्।
स्नानोत्तरीयाणि भवन्ति सङ्गान्
निर्मोकपट्टाः फणिभिर्विमुक्ताः॥
Ragh. xvi. 17.

दैतेयदन्तावलदन्तघातैः
क्षुण्णान्तराः स्फाटिकहर्म्यपङ्क्तीः।
महाहिनिर्मोकपिनद्धजालाः
स वीक्ष्य तस्यां विषसाद सद्यः॥
Kum. xiii. 37.

In fact the whole of the description of the depopulated capital of the Uttarakośalas, given in the sixteenth canto, may be said to be reproduced in the thirteenth canto of the Kumârasambhava, where the city of the Gods has suffered the same fate through the ravages of the Asuras as Ayodhyâ had through neglect of the descendants of Râma. In both, the state of the bathing ponds attached to the houses is deplorable (Ragh. xvi. 13, Kum. xiii. 38, 39). The flower-trees in the gardens of each, of which the boughs were before gently bent down and the flowers plucked tenderly through kindness by the ladies, were now either cut down or rudely violated (Ragh. xvi. 19, Kum. ii. 41, xiii. 32). In both, the net-work of the windows through which the beautiful eyes of young women were accustomed to peep out, are now spread over by the cobwebs of spiders (Ragh. xvi. 20, Kum. xiii. 40).

The nineteenth canto of our poem has its counterpart in the eighth of the Kumârasambhava. Notably stanza 18 will suggest comparison with Kum. viii. 59, and stanza 28 with Kum. viii. 11.

Among individual analogies the following are noteworthy. **काम्य-भिख्या तयोरासीत्** Ragh. i. 46, **कामप्यभिख्यां स्फुरितैरपुष्यत्** Kum. vii. 18; the description of a hermitage, Ragh. i. 50-53, Kum. viii. 38; the feeling of an agreeable sensation with the eyes closed

उपान्त्यसंमीलितलोचनो नृपः चिरात्सुतस्पर्शरसज्ञतां ययौ Ragh. iii. 26, xiv. 2, शृङ्गेण च स्पर्शनिमीलिताक्षीं मृगीं Kum. iii. 36; the setting sun leaving his splendour behind him in the person of fire, दिनान्ते निहितं तेजः सवित्रेव क्रताशनः प्रतिपद्य Ragh. iv. 1, भानुमग्निपरिकीर्णतेजसम् Kum. viii. 41; लीलारविन्दं Ragh. vi. 13, Kum. iii. 56, Meghadûta ii. 2 हस्ते लीलाकमलम्, etc.; the march of an army raising clouds of dust which rise up to the skies and hide the sun from the sight, Ragh. vii. 36, Kum. xiv. 19, 20; the heads of fighting warriors carried away by vultures the moment they are severed by sharp-edged discs, Ragh. vii. 43, Kum. xvi. 27; a mirror soiled by warm respirations, Ragh. vii. 65, Kum. ix. 15; age is not the criterion of those that are endowed with natural lustre तेजसां हि न वयः समीक्ष्यते Ragh. xi. 1, Kum. v. 16 (see also Vikramorvaśî, Act v. 18, न खलु वयसा जात्यैवायं स्वकार्यसहोभरः); a road that is made unsafe by way-layers, खिलीकृते पथि Ragh. xi. 14, दृप्तासुरचासखिलीकृतात्..... मार्गात् Kum. xii. 2; all the ominous phenomena referred to in Ragh. xi. 58-61 have their parallels in Kum. xi. 13-24; passing through the skies in a Vimâna or balloon, आत्मनः पदं विमानेन विगाहमानः Ragh. xiii. 1, नभो विमानेन विगाहमानः Kum. xi. 4; the flowing of numerous rivers into the ocean compared to the many wives of a man kissing him, Ragh. xiii. 9, Kum. viii. 16; the manner of practising the penance styled पञ्चाग्निसाधनं, Ragh. xiii. 41, Kum. v. 20; a river with its waves compared to a woman that embraces with her arms, Ragh. xiii. 63, Kum. x. 32; the husband or wife so separated that they are not to be seen by each other again, अत्यन्तलुप्तप्रियदर्शनेन Ragh. xiv. 49, प्रियमत्यन्तविलुप्तदर्शनम् Kum. iv. 2; the Vâlakhilyas heralding the passage of the sun and singing psalms to him, Ragh. xv. 10, Kum. viii. 41; dust turned to mud and mud to dust, Ragh. xvi. 30, Kum. xiv. 42; a talisman of victory is जयश्रियः संवननं, Ragh. xvi. 74, Kum. xiv. 2; the Sirisha flower is the standard of tenderness शिरीषपुष्पाधिकसौकुमार्यैः Ragh. xviii. 44, शिरीषपुष्पाधिकसौकुमार्यौ बाह्वं तदीयाविति मे वितर्कः Kum. i. 41.

Before quitting the subject of the Kumârasambhava, it is necessary to call attention to the fact that Kâlidâsa not only expresses similar thoughts in similar phrases in the two poems, but employs the same metres in both of them for treating the same subjects. Thus it is remarkable that prayers are chanted in the *anushṭubh*

metre (Ragh. x. Kum. ii.); a marriage celebrated in the *upajâti* (Ragh. vii. Kum. vii.); death lamented, no doubt suitably, in the *viyoginî* (Ragh. vii. Kum. iv.); the fallen condition of Ayodhyâ and the city of the Gods pathetically regretted in the *upajâti* (Ragh. xvi. Kum. xiii.); and the *rathoddhatâ* devoted to the amorous pastimes of lovers (Ragh. xix. Kum. viii.). The coincidence does not appear to be accidental, but seems, at least to me, to owe its origin to a natural desire of the poet the more easily to reproduce in one of the poems some of his favourite passages from the one he had written before.

To turn now to the beautiful little poem of Meghadûta. Even Prof. Weber, in his essay on the Râmâyaṇa, seems to admit that this poem is by the author of the dramas. And as it is not doubted [illegible]at the Sâkuntala and the Vikramorvaśî belong to one and the [illegible]me Kâlidâsa, it may be worth while to see what evidence those [illegible]vo dramas and the Meghadûta cumulatively afford, tending to solve [illegible]e question of whether the three poems belong to the Kâlidâsa [illegible]o has given us the dramas. For this purpose, as what has been above will have quite satisfactorily established that the Raghu[illegible]śa and the Kumârasambhava are to be assigned to the same [illegible]lâsa, it will only be necessary that the evidence of parallel passages to be found in the dramas and the Meghadûta may bear upon either of those two poems.

Beginning with the Sâkuntala, the benedictory stanza reminds us that the author is a devotee of Śiva, the deity which is invoked at the commencement of the Raghuvaṁśa, the Vikramorvaśî, and the Mâlavikâgnimitra, and which constitutes one of the heroes of the Kumârasambhava, and is reverentially alluded to in the Meghadûta (i. 37-40, *Bombay Edn.*). One of the eight forms (*tanus*)—viz. the Sun—specified in the Nândî is alluded to as such in Kum. viii. 52. Passing on, we come to the modest standard of excellence the poet proposes to himself, viz. the satisfaction of the good to undergo whose just criticism is as gold passing through a crucial test, आ परितोषाद्विदुषां न साधु मन्ये, etc. (Sâk. Act i. 2, Bom. Edn. of Śake 1783). The same modest test inspired the poet's request to the audience in the Vikramorvaśî (Act i. 2). Both should be compared with Ragh. i. 2, 3, 4, 9, 10. The Śirîsha, the Navamalli, and the Pâṭala flowers are the same favourites in the Ragh. and the Kum.

that they are in the dramas. The affection of love (*Vikâra* or *Vikṛiti*) suddenly felt by Śiva (Kum. iii. 69) in the presence of Kâma surprises that divine practiser of austerities similarly to Śâkuntala struck with the same passion in her father's hermitage in the presence of King Dushyanta (Act i. किं णु खु दमं जणं पेक्खिअ तवोवणविरोहिणो विआरस्स गमणीअह्मि संवुत्ता). The following two stanzas on hunting are but paraphrases of each other in different metres:

Ragh. ix. 49.

परिचयं चललक्ष्यनिपातने
भयरुषोश्च तदिङ्गितबोधनम् ।
श्रमजयात्प्रगुणां च करोत्यसौ
तनुमतोनुमतः सचिवैर्यया ॥

Śâk. Act ii. 5.

मेदश्छेदकृशोदरं लघु भवत्युत्था-
नयोग्यं वपुः
सत्त्वानामपि लक्ष्यते विकृतिमच्चित्तं
भयक्रोधयोः ।
उत्कर्षः स च धन्विनां यदिषवः सि-
ध्यन्ति लक्ष्ये चले
मिथ्यैव व्यसनं वदन्ति मृगयामी-
दृग्विनोदः कुतः ॥

And so the following, in which the deer, the birds, and the t[illegible] of the forest express their sorrow in ways best suited to them[illegible] one for the misfortunes of Sitâ, and in the other for the departure of Śâkuntala from the hermitage:

Ragh. xix. 69.

नृत्यं मयूराः कुसुमानि वृक्षा
दर्भानुपात्तान्विजहुर्हरिण्यः ।
तस्याः प्रपन्ने समदुःखभावम्
अत्यन्तमासीद्रुदितं वनेपि ॥

Śâk. Act iv. 12.

उग्गलिअदब्भकवला
मिआ परिच्चत्तणच्चणा मोरा ।
ओसरिअपण्डुपत्ता
मुञ्चन्ति अस्सू विअ लदाओ ॥

The marriage of the mango tree with a creeper, spoken of in canto viii. stanza 60, readily reminds one of that beautiful passage in the Śâkuntala (Act iv. 13) in which Śâkuntala's foster-father expresses satisfaction at the connexion that she had formed, and promises soon to bring about the other match, when bidding adieu to his daughter. The mind, according to Kâlidâsa, remembers unconsciously the associates of a former life—a theory which he propounds in the following stanzas:

Ragh. vii. 15.	Sâk. Act v. 2.
रतिस्मरौ नूनमिमावभूतां राज्ञां सहस्रेषु तथा हि बाला। गतेयमात्मप्रतिरूपमेव मनो हि जन्मान्तरसंगतिज्ञम्॥	रम्याणि वीक्ष्य मधुरांश्च निशम्य शब्दान् पर्युत्सुको भवति यत्सुखितोपि जन्तुः। तच्चेतसा स्मरति नूनमबोधपूर्वं भावस्थिराणि जननान्तरसौहृदानि[1]॥

Who does not see the close relationship between the following three sets of questions, each asked by a king inquiring about the health of a hermit and the peace of his hermitage?

Ragh. v. 5, 7, 6.	Sâk. Act v. 9.	Kum. v. 32, 35, 34.
कायेन वाचा मनसापि शश्वत् यत्संभृतं वासवधैर्यलोपि। आपाद्यते न व्ययमन्तरायैःकच्चिन्महर्षेस्त्रिविधं तपस्तत्॥	किमुद्दिश्य काश्यपेन..ऋषयः प्रेषिताः स्मुः? किं तावद्वृतिनामुपोढतपसां विघ्नैस्तपो दूषितम्।	अपि स्वशक्त्या तपसि प्रवर्तसे शरीरमाद्यं खलु धर्मसाधनम्।
क्रियानिमित्तेष्वपि वत्सलत्वाद् अभीक्ष्णकामा मुनिभिः कुशेषु। तदङ्कशय्याच्युतनाभिनाला कच्चिन्मृगीणामनघा प्रसूतिः॥	धर्मारण्यचरेषु केनचिदुत प्राणिष्वसच्चेष्टितम्।	अपि प्रसन्नं हरिणेषु ते मनः करस्थदर्भप्रणयापहारिषु।
आधारबन्धप्रमुखैः प्रयत्नैः संवर्धितानां सुतनिर्विशेषम्। कच्चिन्न वाय्वादिरुपप्लवो वः श्रमच्छिदामाश्रमपादपानाम्॥	आहो स्वित्प्रसवो मामापचरितैर्विष्टम्भितो वीरुधाम्। इत्यारूढबहुप्रतर्कमपरिच्छेदाकुलं मे मनः॥	अपि त्वदावर्जितवारिसंभृतं प्रवालमासामनुबन्धि वीरुधाम्।

The ancestors of Dushyanta show the same anxiety for their

[1] See also Ragh. xviii. 49.

sacrificial cake and oblation as those of Dilipa, at the prospect of their races being left without a male to offer them in future:

Ragh. i. 66, 67.	Sâk. Act vi. 22.
नूनं मत्तः परं वंश्याः पिण्डविच्छेद- दर्शिनः।	राजा। अहो दुष्यन्तस्य संशयमारूढाः पिण्डभाजः। कुतः।
न प्रकामभुजः श्राद्धे स्वधासंग्रहत- त्पराः॥	अस्मात्परं बत यथाश्रुतिसंभृतानि
मत्परं दुर्लभं मत्वा नूनमावर्जितं मया।	को नः कुले निवपनानि नियच्छतीति।
पयः पूर्वैः स्वनिःश्वासैः कवोष्णमुप- भुज्यते॥	नूनं प्रसूतिविकलेन मया प्रसिक्तं धौताश्रुशेषमुदकं पितरः पिबन्ति॥

The Kumârasambhava is not the only poem in which Kâlidâsa speaks (i. 1) of a long mountain range as dipped with its two ends in the eastern and the western seas—"**पूर्वापरौ तोयनिधी वगाह्य स्थितः**"; the Hemakûṭa is also "**पूर्वापरसमुद्रावगाढः**" Sâk. Act vii. The curse under which Dilipa was labouring, and which had made him heirless, was the result of an accidental transgression by him in not having bowed down to and walked round the heavenly cow Surabhi, who was sitting under a tree when he passed by.

आसीत्कल्पतरुच्छायामाश्रिता सुरभिः पथि

* * * *

प्रदक्षिणक्रियार्हायां तस्यां त्वं साधु नाचरः

अवजानासि मां यस्मादतस्ते न भविष्यति। प्रजेति शशाप i. 75-77.

King Dushyanta is more cautious, and avoids a similar error, and on being told the sage Mârîcha lived on the Hemakûṭa, at once remarks: **तेन हि अनतिक्रमणीयानि श्रेयांसि प्रदक्षिणीकृत्य भगवन्तं गन्तुमिच्छामि।**

The following are a few of many analogous short phrases and illustrations to be found in the Sâkuntala and the Raghuvaṁśa: **परिवाह** overflow, **पढमं सपरिवाहं (कुतूहलम्) आसि** Act ii., **रागपरिवाहिणी गीतिः** Act v., **परिवाहमिवावलोकयन् स्वशुचः** Ragh. viii. 73; the simultaneous setting and rising of the sun and moon respectively; Ragh. xi. 24, Sâk. iv. 2, **पदं क्र** to set foot on, to enter upon, **सही पदं कारिदा** Act iv., **शान्ते करिष्यसि पदं पुनराश्रमेऽस्मिन्**

Act iv. 19, Kum. iii. 33, v. 21, viii. 13, vi. 14; गोत्रस्खलनम् mistaking a name, Act vi. 2, Ragh. xix. 24, Kum. iv. 8; सिढिलकेसबन्धणुब्भन्तकुसुमेण, etc., from which the flowers had *dropped* उद्वेष्टनवान्तमाल्यः केशपाशः Ragh. vii. 6; अवदानतोषितः pleased with the exploit, Sâk. Act vii. 1, Ragh. xi. 21; King Dilîpa following the sacred cow seemed like unto *vidhi* (the performance of religious works), अद्येव साचाद्विधिनोपपन्ना Ragh. ii. 16. The same simile is used to compare the union of Dushyanta and Sâkuntala, अद्या वित्तं विधिश्चेति चितयं..... समागतम् Act vii. 29. The simile being very unusual, and one of those that are characteristic of Kâlidâsa, its occurrence in the two works is particularly valuable as bearing upon the present inquiry.

King Purûravas, soon after his union with Urvaśî, goes with this his new bride into the forest of the mountain Gandhamâdana, to enjoy himself. Similarly Śiva and Pârvatî in the Kumârasambhava resort to the same place (canto viii. 28) after their marriage, and there is considerable similarity between the beautiful descriptions of the various objects Śiva shows to his wife and King Purûravas observes in his bewilderment during the temporary loss of his wife, the offended nymph. As in the Vikramorvaśî (Act iv. stanza 5), so in the Raghuvaṁśa (xiii. 29), the appearance of wild plantain trees growing on the slopes of mountains in the rainy season furnishes the poet with an illustration for the eyes of a woman that are reddened by anger or some other cause. One of Kâlidâsa's favourite ideas, a doe stopped and prevented from joining the herd by her fawn "loving the udder," finds expression in the following lines:

Ragh. ix. 55.	Vikram. Act iv. 32.
तस्य स्तनप्रणयिभिर्मुक्तरेणुशावै- र्व्याहन्यमानहरिणीगमनं पुरस्तात् आविर्बभूव .... मृगाणां यूथम्	अस्यान्तिकमायान्ती शिशुना स्तन- पायिना मृगी रुद्धा तामयमनन्यदृष्टिर्भयग्रीवो विलोक- यति।

King Nala (Ragh. xviii. 6) retires to the forest and forms friendship with the beasts thereof मृगैरजर्यं जरसोपदिष्टमदेहबन्धाय पुनर्वबन्ध, which little differs from the following in the Vikramorvaśî, अहमपि तव सूनावायुषि न्यस्तराज्यो विचरितमृगयूथान्याश्रयिष्ये वनानि

Act v. 17. The elephant is as fond of the fragrant *sallakî* plant in the Vikramorvaśî,

अयमचिरोद्गतपल्लवमुपनीतं प्रियकरेणुहस्तेन
अभिलषतु तावदासवसुरभिरसं सल्लकीभङ्गम् Act iv. 23.

as in the Kumârasambhava,

स्नानमाह्निकमपास्य दन्तिनः
सल्लकीविटपभङ्गवासितम्।
आविभातचरणाय गृह्णते
वारि वारिरुहवद्धषट्पदम् viii. 33.

Of short phrases the following seem to be interesting: पर्यायसेवा *i.e.* service by rotation, Kum. ii. 36, अक्षरावारपज्जाएण, Vikram. Act iv. *ad init.*; प्रभापल्लवितो मणिः, Act v. 3, which is evidently the same as स्फुरत्प्रभामण्डलः, quoted before. We may also notice the allusion to the descent of the Moon from Atri (Ragh. ii. 75, Vikr. Act v. 21); and the allusion contained in the following lines, probably to cantos xii. and xiii. of the Kumârasambhava: आयुषो यौवराज्यश्रीः स्मारयत्यात्मजस्य ते। अभिषिक्तं महासेनं सेनापत्ये मरुत्वता Vikram. Act v. 23. Lastly, the blessing pronounced at the end of the fifth Act may be compared with Ragh. vi. 29, the poet alluding probably to personal experience that wealth and learning are naturally disinclined to associate with each other.

The Vikramorvaśî furnishes a pretty large number of analogies to the Meghadûta, both in thoughts, expressions, and allusions. We can only notice such of them as are prominent. The one (Act ii.) describes the light of the sun as आलोकान्तात्प्रतिहततमोवृत्तिरासां प्रजानाम् stanza 1, the other (ii. 3) नित्यज्योत्स्नाप्रतिहततमोवृत्तिरम्याः प्रदोषाः. In Act ii. the king says मया खलु दुर्लभप्रार्थिता कथमात्मा विनोदयितव्यः, and further on असुलभप्रार्थनादुर्निवारं मनो मे (Act ii. 6), with which we may compare the दुर्लभप्रार्थनं चेतः, etc., of Meghad. ii. 47. Again, the day is easily spent in the ordinary duties of life, but the night is restless कार्यान्तरितोत्कण्ठं, etc., Act iii. 4; Meghad. ii. 27, सव्यापारा, etc.; the face of a woman with the dishevelled hairs hanging over it compared to the rising moon as yet hidden in the darkness of the night, Act iii. 6 उदयगूढशशाङ्क, etc., Megh. ii. 23; the river whose stream is obstructed

by rocks occurring in its way, Act iii. 8, Megh. i. 19 रेवां द्रक्ष्यस्युपल-विषमे विन्ध्यपादे विशीर्णाम्. The nymph is offended that the king fixed his eye on Udayavatî, a Vidyâdhara's daughter, as this latter was playing on the sand bank of the Mandâkinî, Act iv. *ad init.* तहिं मन्दाइणीपुलिणपच्चन्ते कीलमाणा विज्जाहरदारिआ उदयवदी णाम देण राएसिणा णिद्दिआदेत्ति कुविदा. What else than an explanation and a paraphrase, such as the author who wrote the above alone could give, is the following?

मन्दाकिन्याः पयसि शिशिरैः सेव्यमाना मरुद्भि-
र्मन्दाराणामनुतटरुहां छायया वारितोष्णाः।
अन्वेष्टव्यैः कनकसिकतामुष्टिनिक्षेपगूढैः
संक्रीडन्ते मणिभिरमरप्रार्थिता यत्र कन्याः॥ ii. 6.

The anxiety and apprehension felt by lovers at the approach of the rain-cloud may be a common property of all poets writing, as it were, to a pattern furnished by the teachers of the Alankâraśâstra; but what should make the same word *sannaddha* be used in the following stanzas, except the circumstance that the same poet wrote them both?

Vikram. Act iv. 1.	Meghad. i. 8.
नवजलधरः संनद्धोयं न दृप्तनिशा-चरः।	कः संनद्धे विरहविधुरां त्वय्युपेक्षेत जायाम्?

Again, the words मघालोके भवति सुखिनोप्यन्यथावृत्ति चेतः, etc., Megh. i. 3, are only a paraphrase of Chitralekhâ's words: इमिणा उण णिव्वुदाणं वि उक्कण्ठाकालिणा मेहोदएण अणत्थाहीणो हविस्सदि, Vikram. Act. iv. Praveś.

The following is said of the lightning, the associate of the rain-cloud:

Act iv. 1.	Meghad. i. 41.
कनकनिकषस्निग्धा विद्युत्प्रिया न ममोर्वशी।	सौदामिन्या कनकनिकषस्निग्धया दर्शयोर्वीम्।

The lightning here referred to as the only light that benighted persons look to when other lights fail, is again referred to in the same Act, हन्त मदीयैर्दुरितपरिणामैर्मेघोपि शतह्रदाशून्यः. In the estimation of the good, the performance of service to suitors is more

important than their own interests, and their only reply is the granting the suit itself, स्वार्थात्सतां गुरुतरा प्रणयिक्रियैव Act iv. 15, Meghad. ii. 53, प्रत्युक्तं हि प्रणयिषु सतामीप्सितार्थक्रियैव. The circles of light in the following stanzas deserve, I think, particular attention:

Vikram. Act v. 2.	Meghad. i. 48.
असौ मुखालम्बितहेमसूत्रं विभ्रन्मणिं मण्डलचारुशीघ्रम्। अलातचक्रप्रतिमं विहंगस् तद्रागरेखावलयं[1] तनोति॥	ज्योतिर्लेखावलयि गलितं यस्य बर्हं भवानी ....कर्णे करोति...तं मयूरं न- र्तयेथाः

The allusion to the *nichula* tree in Act iv. stanza 4, and Meghad. i. 14, is not in itself of much value except for the tradition which Mallinâtha has preserved and handed down to us, that the latter passage contains an occult allusion to a contemporary poet, fellow-student, and friend of Kâlidâsa, nicknamed Nichula, and to Dingnâga, one of his (Kâlidâsa's) rivals,[2] whose histrionic gestures (ac-

[1] तद्रागरेखावलयं तस्य मणेः रागस्य प्रभाया रेखा राजिस्तस्या वलयं मण्डलम् Kâṭavema *ad loc.*

[2] The passage certainly very well bears the double construction put upon it by the scholiast. It is remarkable neither the Sanskrit-German *Wörterbuch* nor Monier Williams seems to be aware of the passage, as neither of them notices the tradition and not even the name of Nichula. Here is the passage: अन्येद्मपि अर्थान्तरं ध्वनयति। रसिको निचुलो नाम महाकविः कालिदासस्य सहाध्यायः परापादितानां कालिदासप्रबन्धदूषणानां परिहर्ता यस्मिन्स्थाने तस्मात्स्थानादुदङ्मुखो निर्दोषत्वादुन्नतमुखः सन् पथि सारस्वतमार्गे दिङ्नागानाम्। पूजायां बहुवचनम्। दिङ्नागाचार्यस्य कालिदासप्रतिपक्षस्यावलेपान् हस्तविन्यासपूर्वकाणि दूषणानि परिहरन्॥.....। अद्रेरद्रिकल्पस्य दिङ्नागाचार्यस्य शृङ्गं प्राधान्यं .... हरति किंस्विदिति हेतुना सिद्धैः सारस्वतसिद्धैर्महाकविभिरङ्गनाभिश्च दृष्टोत्सहः सन् खमुत्पत उच्चैर्भवेति॥ स्वप्रबन्धमात्मानं वा प्रति कवेरुक्तिरिति॥ संसर्गतो दोषगुणा भवन्तीति चेन्मृषा येन जलाशयेपि स्थित्वानुकूलं निचुलश्चलन्तमात्मानमारचति सिन्धुवेगादित्येतच्छ्लोकनिर्माणात्तस्य कवेर्निचुलसंज्ञेत्याहुः॥ The *Śabdârṇavakośa* recognizes Nichula as a proper name, being that of a poet: वानीरे कविभेदे स्यान्निचुलः स्खलवेतसे॥ Mallin. *ad loc.*

cording to Mallinâtha, censures accompanied by gestures of the hand) the poet ridicules and tells his own poem to avoid.

Now the Meghadûta abounds in passages bearing ample testimony to its having been written by the author of the Kumârasambhava, the Raghuvañśa, and, as we have already seen, the Vikramorvaśî. In the first place the poem has for its subject that particular passion in the delineation of which Kâlidâsa excels, and to dwell on which he always seeks opportunities. Then, as in the Kumârasambhava, the Vikramorvaśî, the Śâkuntala, and partly in the Raghuvañśa, the Himâlaya and those divine forests, mountains, rivers, and cities which the poets love to associate with that abode of the Gods, chiefly occupy the poet's attention. Moreover, illustrations derived from sources so familiar to the reader of the dramas and the Raghuvañśa and the Kumârasambhava, are found in the Meghadûta to an extent which, considering the size of the latter, is not small. Allusions to the same events, objects, and circumstances strengthen the evidence afforded by the illustrations. The following instances leave little doubt that the same poet that wrote the *Cloud Messenger* was also the author of the Raghuvañśa: the *vaprakriyâ* or *vaprakrîdâ* of an elephant or bullock, Megh. i. 2, 56, ii. 52, Ragh. v. 44; the effect of the rain-cloud and its friends the peacock, the Kâdamba-flower, thunder, and the plantain flower, on lovers separated from their wives, Megh. i. 3, Ragh. xiii. 26, 29; a mountain spoken of as the breast of the earth, Megh. i. 18, Ragh. iv. 51; a city described as a colony from heaven, Megh. i. 31, Ragh. xv. 29, and Kum. vi. 37 (quoted before), Vikram. Act ii. **णं वत्तव्वं ठाणन्तरगदो सगोत्ति**; the same allusion to Ujjayinî, the river Siprâ, and the shrine of Mahâkâla Śiva, Megh. i. 31, 32, 38, Ragh. vi. 32, 34; the pigeons occupying the inner side of the eaves of houses, Megh. i. 42, Vikr. iii. 2, Mâlavikâ. ii. 13; the Ganges seeming to join the Jamnâ elsewhere than at Prayâga, the place of the actual confluence (this, I think, appears to be one of those ideas that, if I may say so, are Kâlidâsa's private property), Megh. i. 55, Ragh. vi. 48; sitting on a rock cooled by the vapours of the Ganges, and perfumed with musk or other natural resin deposited on it, **आसीनानां सुरभितलं नाभिगन्धैर्मृगाणाम् । तस्या एव प्रभवमचलं प्राप्य गौरं तुषारैः** Meghad. i. 56, **अध्यास्य चाभ्रःपृषतोक्षितानि शैलेयगन्धीनि शिलातलानि**, Ragh. vi. 51, quoted before, where the citation from the Kum. may also be com-

pared; the dry bambus, filled with the wind, sound like flutes, and the sylvan deities sing to their music their songs of victory in honour of some hero:

Ragh. ii. 12.	Meghad. 1. 60.
स कीचकैर्मारुतपूर्णरन्ध्रैः	शब्दायन्ते मधुरमनिलैः कीचकाः
कूजद्भिरापादितवंशकृत्यम् ।	पूर्यमाणाः
शुश्राव कुञ्जेषु यशः स्वमुच्चै-	संसक्ताभिस्त्रिपुरविजयो गीयते किं-
रुद्गीयमानं वनदेवताभिः ॥	नरीभिः ।

The marble walls of Kailâsa, transparent like glass, and used by the Goddesses for mirrors, are as uppermost in the poet's mind in the Meghadûta i. 62, कैलासस्य त्रिदशवनितादर्पणस्य, as they were when he described them in the Kumârasambhava:

विलोक्य यत्र स्फटिकस्य भित्तौ
सिद्धाङ्गनाः स्वप्रतिबिम्बमारात् ।
सुविस्मितस्य स्फटिकाशुगुप्ते-
श्चन्द्रस्य चिह्नप्रकरः करोति ॥
यदीयभित्तौ प्रहितिबिम्बिताङ्गम्
आत्मानमालोक्य
निशासु यत्र प्रतिबिम्बितानि
ताराकुलानि स्फटिकालयेषु
नभश्चरीमण्डनदर्पणश्रीः । ix. 40-44.

So the trees buzzing with humming bees (Megh. ii. 3, यत्रोन्मत्त-भ्रमरमुखराः, etc., Ragh. ix. 32, xvi. 47). The following are each a description of the blessed condition of a city on the Himâlaya:

Meghad. ii. 4

आनन्दोत्थं नयनसलिलं यत्र (*i.e.* अलकायां) नान्यैर्निमित्तै-
र्नान्यस्तापः कुसुमशरजादिष्टसंयोगसाध्यात् ।
नाप्यन्यस्मात् प्रणयकलहाद्विप्रयोगोपपत्ति-
र्वित्तेशानां न च खलु वयो यौवनादन्यदस्ति ॥

Kum. vi. 44.

यौवनान्ते वयो यस्मिन् (*i.e.* ओषधिप्रस्थे) नान्तकः कुसुमायुधात् ।
रतिखेदसमुत्पन्ना निद्रा संज्ञाविपर्ययः ॥

Again,

Meghad. 66.

यस्यां (अलकायां) यक्षाः सितमणिमयान्येत्य हर्म्यस्थलानि
ज्योतिर्लेखाकुसुमरचितान्युत्तमस्त्रीसहायाः
आसेवन्ते मधु°

Kum. vi. 42.

यत्र (ओषधिप्रस्थे) स्फटिकहर्म्येषु नक्तमापानभूमिषु ।
ज्योतिषां प्रतिबिम्बानि प्रामुवन्त्युपहारताम् ॥

The banished Yaksha, though seeing (Megh. ii. 43) the prototypes of his absent wife's beauty in the objects around him, finds no more consolation in them than did Aja in those of his wife's (Ragh. viii. 58, 59).

Similarly, when, lamenting their separation from their beloved wives, the one is deceived by a dream and the other gives vent to his sorrows, both awaken the sympathy of the sylvan deities or of the trees they haunt, and make them shed tears of compassion in the shape of gum or dew-drops:

Meghad. ii. 45.

मामाकाशप्रणिहितभुजं निर्दयाश्लेष-
हेतोर्लब्धायास्ते कथमपि मया
स्वप्नसंदर्शनेषु ।
पश्यन्तीनां न खलु बहुशो न स्थली-
देवतानां मुक्तास्थूलास्तरुकिसल-
येष्वश्रुलेशाः पतन्ति ॥

Raghu. viii. 69.

विलपन्निति कोशलाधिपः
करुणार्थग्रथितं प्रियां प्रति ।
अकरोत्पृथिवीरुहानपि
सुतशाखारसबाष्पदुर्दिनान् ॥

We may further compare the emaciated wrists of the Yaksha, who was कनकवलयभ्रंशरिक्तप्रकोष्ठः (Meghad. i. 2), and King Dushyanta, who says his मणिबन्धनात्कनकवलयं स्रस्तं स्रस्तं मया प्रतिसार्यते (Śak. iii. 13, the bracelet is further alluded to in Act vi. 3). Hope supports the hearts, tender as flowers, of young women when they are separated from their husbands, आशाबन्धः कुसुमसदृशं प्रायशो ह्यङ्गनानां सद्यःपाति प्रणयिहृदयं विप्रयोगे रुणद्धि (Meghad. i. 10); गुरूण्यपि विरहदुःखानि आशाबन्धो सहावेदि, "hope renders sorrows of separation, though great, bearable" (Śāk. iv. 30). The prominent allusion to Skanda's birth and his leadership of the celestial armies in

रक्षाहेतोर्नवशशिभृता वासवीनां चमूनामत्यादित्यं हुतवहमुखे संभृतं तद्धि तेजः (Meghad. i. 47), repeated in Raghu. ii. 75 and vii. 1, appears to me to point not only to the story of Skanda, but also to the Kumârasambhava, canto ix. (see especially stanzas 13, 14). We may also refer to Meghad. i. 11, श्रुत्वा ते श्रवणसुभगं गर्जितं मानसोत्काः आ कैलासाद्विसकिसलयच्छेदपाथेयवन्तः संपत्स्यन्ते नभसि भवतो राजहंसाः सहायाः, and Vikramorvaśî मेघश्यामा दिशो दृष्ट्वा मानसोत्सुकचेतसाम्..... (Act iv. 14), पश्चात्सरः प्रतिगमिष्यति मानसं त्वं पाथेयमुत्सृज विसं ग्रहणाय भूयः (Act iv. 15), in which passages the Râjahaṁśa or flamingo is represented as preparing itself, on seeing the rain-cloud and hearing the thunder, to migrate, and furnishing itself with the stalks of lotuses as "food on the road" (पाथेयम्), to be eager to proceed towards the Mânasa lake. I pass over many analogous short phrases and allusions in the Meghadûta, and the Kumârasambhava, and the Raghuvaṁśa, as I trust I have adduced sufficient evidence in vindication of Kâlidâsa's authorship of the last work.

Now if it be, as I trust it will be, admitted that I have succeeded in showing that the same Kâlidâsa that wrote the Kumârasambhava also wrote the Raghuvaṁśa, there is one important fact that, independently of the internal evidence quoted above, not only shows that that Kâlidâsa who composed the dramas and the Meghadûta also composed the Raghuvaṁśa and the Kumârasambhava (I leave the Ritusaṁhâra and other works attributed to Kâlidâsa for the present out of consideration, as the present inquiry does not extend to them), but also contributes very much to our being able to arrive at a sound conclusion regarding his age. I refer to the fact that Kshîrasvâmî, the celebrated commentator on the Amarakośa and a grammarian, quotes the Kumârasambhava under the name of Kâlidâsa. One of the passages quoted is as follows:

स्त्रीपुंसौ मिथुनं द्वन्द्वं युग्मं तु, etc., Amara, ii. मनुष्यव° 39.

Kshîrasvâmî: मिथ्यते संगच्छते मिथुनं मिधृ मेधृ संगमने द्वन्द्वमिति द्वन्द्वं रहस्यमर्यादेति साधुः । यत्कालिदासः । द्वन्द्वानि भावं क्रियया विवव्रुः ॥ Kum. iii. 35.

It is clear that Kshîrasvâmî quotes the Kumârasambhava as a work of Kâlidâsa, and it is therefore beyond doubt that the Raghuvaṁśa

also must be the work of Kâlidâsa, as both the works have been shown to belong to the same identical author.

But it is not necessary to *infer* the existence of the Raghuvaṁśa in the time of Kshîrasvâmî. For we find it frequently quoted by him in the same commentary. Among the quotations are the following:

यथा। वार्द्धके मुनिवृत्तीनाम् i. 8, on ii. मनुष्यव° 41.

यद्द्रवोत्तरदिग्विजये। दुधुवुर्वाजिनः स्कन्धान् लग्नकुङ्कुमकेसरान iv. 67 on ii. मनुष्यव° 124.

प्रायोपवेशनमतिर्नृपतिर्बभूव viii. 93 on ii. ब्रह्मव° 53 iii. ना 123.

यल्लक्ष्यम्। यातेति जन्यानवदत्कुमारी vi. 30 on ii. ब्रह्मव° 57.

There are several other passages quoted, but those above given will suffice to prove that the Raghuvaṁśa existed and was considered a standard work when Kshîrasvâmî lived.

Now as regards the date of Kshîrasvâmî, the *Râjataraṅgiṇî* enables us to assign him to the middle of the eighth century of Christ. It states that Jayâpîḍa, the mighty Emperor of Kâśmîra, "who brought back learning to Kâśmîra, the country of its birth, from distant countries whither it had fled, and who caused the Mahâbhâshya, that was well nigh lost, to be brought from other countries, and interpreting it caused it to be studied in his empire. Having received his knowledge from the Professor of the science of lexicography named *Kshîra, Paṇḍita Jayâpîḍa* was reckoned among the wise." The name *Kshîra*, for *Kshîrasvâmî*, does not by any means interfere with the identification, as *Svâmî* is merely an honorific affix like *âchârya* in *Sankarâchârya* and *Hemâchârya*. The shorter was the real name, as is shown by the title of his work on grammar called *Kshîrataraṅgiṇî*. And as we know of no other *Kshîra* who was both grammarian and lexicographer and also a teacher of lexicography, the Kshîra mentioned by the Râjataraṅgiṇî is beyond all doubt the celebrated commentator on the Amarakośa. The date of Jayâpîḍa, the son of Vappiya and successor of Sangrâmâpîḍa, varies from A.D. 754 to A.D. 772, according to three different calculations. Now from the manner in which Kshîra quotes the Kumârasambhava and the Raghuvaṁśa, viz. with the simple introduction of यल्लक्ष्यम्, "as may be seen, as for example," and यथा "as," without adding the name of the author quoted from, it is clear that those works

were perfectly well known at that time, and known to be so authoritative that they might be quoted to support or refute the author whom Kshîra was interpreting in his commentary. To obtain such celebrity and authority, the poems must have been written at least one or two centuries before. And this takes us back to the middle of the sixth century.

Dr. Aufrecht, in an analysis of Kshîrasvâmî's commentary, published in the May number of the *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, assigns that commentator of Amarasiṁha to between the eleventh and twelfth centuries, on the ground that he quotes under the name of *Śrîbhoja* a glossary attributed to Bhojadeva, the author of the *Sarasvatîkaṇṭhâbharaṇa*, and that he is quoted by *Vardhamâna*, the author of the *Gaṇaratnamahodadhi*. Now *Bhojadeva* of *Dhârâ* is believed to have lived in the middle of the eleventh century, which date will, I understand, shortly be confirmed by the recent discovery by Dr. Bühler, of Bombay, of *Bhoja's* Karaṇa, called *Râjamṛigâṅka*. But even if it be proved that this *Bhojadeva* was the author of the *Sarasvatîkaṇṭhâbharaṇa*, his date will throw no light on that of *Kshîrasvâmî*. For, in the first place, no glossary is, as far as I know, attributed to *Bhojadeva* of *Dhârâ*; and, secondly, the *Śrîbhoja* so often cited by *Kshîrasvâmî* is evidently a petty commentator on the *Amarakośa*, who may perhaps have written a glossary of his own. But it is in his capacity of commentator on the *Amarakośa*, rather than that of author of a glossary, that he is generally referred to by *Kshîrasvâmî*. In the second and third Kâṇḍas together of the latter's commentary this *Śrîbhoja* is cited twelve times, but only one of these twelve passages may perhaps appear to refer to a glossary by *Śrîbhoja*, the remaining ones being all references to what is doubtless a commentary on the *Amarakośa*. Now it is hard to believe, without any evidence of the fact, and when even the names do not agree fully, that the author of the *Sarasvatîkaṇṭhâbharaṇa* could have stooped to write a commentary on the glossary of *Amarasiṁha*, or that the King of Dhârâ could have cared to think that he could immortalize his name by purchasing the authorship of such a petty work.

The authorship of the *Râjataraṅgiṇî* ought not to be lightly discarded, except on the evidence of indisputable facts. And as long as there is no evidence to connect the *Śrîbhoja* of *Kshîrasvâmî* with

the author of the *Kaṇṭhâbharaṇa*, or the King *Bhojadeva* who lived at *Dhârâ* in the middle of the eleventh century, except the partial coincidence of names, the *Râjataraṅgiṇî* ought to decide the question of *Kshîrasvâmî's* date.

It will be observed that Kshîrasvâmî quotes from the Kumârasambhava in a manner that shows that he either knew only one Kâlidâsa, or that he considered the work he was quoting from to belong to the celebrated Kâlidâsa, who had only to be named to be recognized. Surely if the Kumârasambhava was the production of a Kâlidâsa more modern than or different from that of the dramas, he would either have named the poem itself, instead of its author, or the latter with a distinctive designation, such as **अभिनवकालिदास**, or some similar appellation. The conclusion is therefore unavoidable that in the middle of the eighth century of Christ the Kumârasambhava was considered as a work of the great Kâlidâsa. Of course, it is not probable that an eminent grammarian and scholar like Kshîrasvâmî, extensively read in Sanskrit literature, as is shown by his quotations, might have mistaken a spurious work that was fathered by its real author upon the great poet for one composed by the latter.

Some further evidence throwing light on Kâlidâsa's authorship of the *Raghuvaṁśa*, and also on his date, is afforded by a certain passage in *Pratihâra Indurâja's* commentary on the *Alaṅkâraśâstra* of *Bhaṭṭodbhaṭa*. Dr. Bühler has recently discovered a MS. of this commentary in the celebrated *Bhâṇḍâra* or Library of MSS. at Jesselmir, which is dated Samvat 1160, corresponding to A.D. 1104. The commentary must be much older than the date of that MS., and the *Alaṅkâraśâstra* of *Bhoṭṭodbhaṭa*, which is the subject of the commentary, must be older still. Now the passage referred to may be rendered as follows: "In this manner is the figure of speech called Dîpaka defined and illustrated by the author. Now a question arises here: the author has before, in enumerating the figures of speech, mentioned the figure *Upamâ* first, and then the *Dîpaka*, in the words **उपमा दीपकं चेति**. He ought, therefore, in obedience to the principle that definitions should be given in the same order as that of enumeration, to have defined *Upamâ* first, and then the *Dîpaka*. How is it then that the *Dîpaka* is here defined first? The answer is, that this author has here followed the order of part of the Kumâ-

rasambhava that he himself wrote, and there the figure *Dîpaka* is illustrated before the *Upamâ*, and it is for the purpose of keeping the same order that the order of enumeration has here been disregarded." The words in the original regarding the *Kumârasambhava* are: अनेन ग्रन्थकृता स्वोपरचितकुमारसंभवैकदेशेच उदाहरणत्वेनोपन्यस्तः which would seem to imply that there was in the time of *Bhaṭṭodbhaṭa* a *Kumârasambhava* that had not been written by him—and in all likelihood the *Kumârasambhava* of Kâlidâsa. It may be here mentioned that the verses quoted in the *Bhaṭṭodbhaṭâlankâra* as from his own *Kumârasambhava*, are not found in that of Kâlidâsa. If then the words स्वोपरचितकुमारसंभव in our passage[1] are intended to distinguish *Bhaṭṭodbhaṭa's* Kumârasambhava from that of Kâlidâsa, the latter must be placed prior to the time of the Bhojadeva of Dhârâ, or the middle of the eleventh century.

In connexion with the authorship of Kâlidâsa, it may be mentioned here that by the commentary of Kshîrasvâmî, the Meghadûta and the Vikramorvaśî are also proved to be prior to his date, as he quotes them both. That commentary further shows that the *Mâghakâvya*, the *Kirâtârjunîya*, the *Uttararâmacharita*, and probably the *Veṇîsaṁhâra*, were as well known and considered as standard works as the Raghuvaṁśa when Kshîrasvâmî lived.

The conclusions, then, that the facts given above lead us to are:

1. That the Kâlidâsa of the dramas was also the Kâlidâsa of the poems Raghuvaṁśa, Kumârasambhava, and Meghadûta;
2. That this Kâlidâsa lived considerably prior to the middle of the eighth century; and,
3. That therefore all stories connecting him with a King Bhoja that reigned at Dhârâ in the eleventh century are to be rejected as without foundation.

[1] The whole passage is: एवमेतद्दीपकं लक्षितमुदाहृतं च। ननु उपमाया उपमादीपकं चेति पूर्वमुद्दिष्टत्वाद्यथोद्देशलक्षणमिति न्यायात्तस्या एव पूर्वं लक्षणं कर्तव्यं पश्चात्तु दीपकस्य तत् कथमादौ दीपकं लक्षितमिति वक्तव्यम्। उच्यते। अनेन ग्रन्थकृता स्वोपरचितकुमारसंभवैकदेशेच उदाहरणत्वेनोपन्यस्तः। तत्र पूर्वं दीपकस्य उदाहरणानि तदनुसंधानाविच्छेदायाच्च उद्देशक्रमः परित्यक्तः॥

REMARKS ON THE PRIORITY OF

THE ANCIENT SYSTEMS OF MEDICINE.

By THOMAS A. WISE, M.D.;

Late of the Medical Staff of the Bengal Army;
Author of the "Ancient System of Hindu Medicine," etc.

Both sacred and profane history render it probable that when mankind emerged from their primitive home, they possessed great energy and organic activity, accompanied with a corresponding degree of intellectual force. This enabled them to select a fruitful country as their home, where they soon became rich and powerful, and at an early period assigned a particular class for the acquisition of knowledge. These individuals, distinguished for their power of observation and sound reasoning, opened a vast and interesting field for the exercise of their mental faculties, in the region of abstract speculation. Their knowledge and progress in civilization was aided by their possessing the advantage of high rank in a regular and peaceable government, and a religion abounding in moral precepts.

The most ancient traditions and records of the Western nations refer to the "learning and wisdom of the East," without any distinct mention of the race or nation. Modern investigations tend to prove that the original seat of the Indo-Germanic, or Aryan family of man, was the high table-land contiguous to the lofty range of mountains extending eastward from the Caspian Sea.

Thence they descended to the fruitful plains in a southern and

eastern direction, and at an early age another portion of the Aryan race commenced their wanderings towards the mysterious West. In both countries they distinguished themselves by their knowledge of the medical profession, and each prepared systems of medicine, the priority of which remains still an undecided question.

The age in which the ancient Hindu system was arranged cannot be directly stated; in consequence of their despising dates, as they considered life a transitory state of trial and suffering, and history as of too little importance to occupy the attention of rational beings.

It is hoped that the following deductions will aid us in arriving at an approximate date when the two great works on Hindu medicine were composed, and enable us to compare them with the Greek system. The perishable material on which the ancient Hindu MSS. were written, rendered it necessary to have them frequently copied, in the course of ages, by scribes, often ignorant of the subject, and sometimes, perhaps, careless in their transcriptions. In ancient times these sources of error were to a certain extent avoided. The MSS. were regarded as of a sacred character, and only a limited few were permitted to copy them.

The sacred Hindu Vedas were more studied than the ancient Hindu medical shastres; as the latter were not considered sacred, greater liberties were taken with them, interpolations and clerical errors were introduced by illiterate transcribers. These causes render it very difficult to discover the age of the writings, except by comparing them with other Sanscrit works, the age of which is known. The ablest Sanscrit scholars allow that Charaka and Susruta, the two great commentators of the Ayur Veda, the supposed sacred revelation regarding medicine, are more recent than the grammarian Panini,[1] as neither work is mentioned by him, while both are noticed several times in the Mahábhárata. Professor Wilson supposed this great epic was written the second century before Christ; and, like Panini, was added to, in the course of centuries. Hessler, in his work on Susruta, considered that it was written a thousand years before Christ.[2]

We have, at this early period, two systems of Hindu medicine, com-

[1] He died B.C. 593. See Goldstücker's learned history on Pânini's Place in Sanscrit Literature, p. 83 et seq. He lived before Sakea Muni, the founder of the Buddhist religion, who died about 543 B.C.

[2] A. F. Hessler, Comment. et Annot. Susr. Ayur Veda, 1852, p. 4.

plete in all their parts, founded on anatomy, exhibiting an extensive knowledge of materia medica, and the practice of medicine, an expertness in the manipulations of pharmacy, and a bold and skilful knowledge and practice of surgery. We find the Hindu systems of medicine were originally written on the ancient form and construction of the Sanscrit language; so old, as to be considered the production of the deity, when there was no prejudice of caste, before Polytheism was introduced into the Hindu religion, and in the heroic age, previous to the Mahábhárata.

In considering the Greek system of medicine, we find their physicians and philosophers were indebted to the East for a portion of their knowledge. Pythagoras and Plato obtained many of their philosophical ideas from the Hindus, and the internal evidence of the Greek works proves that the Schools of Hippocrates derived a considerable share of their knowledge from the East. Galen mentions that Hippocrates was often at Smyrna in Asia Minor,[1] and Mercurialis believed that he travelled in Lybia in Africa, and Scythia in Asia.[2] Hippocrates may have visited this northern country to examine the enlightened and skilful Indo-Scythian people, whom Alexander the Great found so expert in the cure of diseases; and in these northern parts of Asia he may have consulted the Hindu sages, and studied their drugs and medical records. The learning he was in search of was there; and the following statements prove his acquaintance with their writings:—

1. The systematic works of the Hindus were most probably prepared from the third to the sixth century B.C.; and long before the age of Hippocrates, the original Ayur Veda existed, from which the other classical works were derived.

2. As medicinal plants have their properties developed in particular soils and climates, they indicate the nations among which they were first used for medicinal purposes, and explain the antiquity of the cultivation of medicine by certain races. The names and medicines recommended in the medical works of Hippocrates often indicate the schools of medicine from which they were borrowed. We find that Hippocrates used in his practice a number of Indian plants, imported from that country into Greece, for their well-known properties; such

[1] In Lib. de Articul. Comment. 1.

[2] Variar Lection, Lib. 2, ch. 18.

as *Sesamum Indicum*, Lin., *Hyperanthera morunga*, *Cardamomum*, *Amomum*, *Laurus cinnamomum*, *Valeriana Jatamonsi*, *Boswellia thurifera*, *Galbanum ammoniacum*, *Sagapenum assafœtida*, etc.[1] He also used black and long pepper, ginger, cassia, spikenard, *Calamus aromaticus*, etc., which are all the products of India or neighbouring countries.

3. The internal evidence of the works of the School of Hippocrates proves them to have been compilations, derived in part from nations further advanced than the Greeks in the knowledge of particular departments of the healing art. The ancient Hindu physicians considered dissection as a necessary part of the education of the medical practitioner. Their method was rude and imperfect, but many of their conclusions were correct, as we have proved by the result of their osteological enumeration, and the accuracy of their description of the internal organs, and of the large vessels of the body.[2]

The ancient Hindu surgeons performed the most difficult operations; such as the Cæsarean section, embryotomy, lithotomy, etc. The first description of the last-named operation was given by Susruta, and was afterwards made known by Celsus,[3] who derived his information from Egyptian surgeons, and they again acquired their knowledge from the East. Hippocrates, the judicious surgeon and benevolent practitioner, allowed, it is incorrectly stated, the performance of this operation only by uneducated quacks.[4]

From these facts it would appear that at an early age the Hindus had made very considerable progress in the healing art, which enabled them to prepare systematic works on medicine, based on their own practical knowledge of anatomy, to which, at that time, the prejudice of mankind in general was so much opposed. Susruta informs us that an accomplished physician must possess an acquaintance with books, or theoretical knowledge, with the dissection of the human body, or anatomy, and a familiarity with the appearance of disease, or practice of medicine. This knowledge explains how the ancient system of Hindu medicine was so complete in all its parts, and

[1] Royle's Essay on the Antiquity of Hindu Medicine, p. 111 et seq.

[2] History of Medicine among the Asiatics, vol. i. s. i. p. 131, and 158 seq.

[3] De Re Med., lib. v. ch. 26.

[4] This injunction in the oath that was taken before entering upon the practice of the medical profession among the Greeks, was most probably a Mahommedan interpolation.

warrants the inference that several centuries were required to complete them.[1] While the nations of the West have been slowly advancing, and mutually aiding one another, during the last two thousand years, the Hindus, by the depressing influence of Brahmanical intolerance and internal warfare, are now in a lower social condition than they were three or four centuries before the Christian era.

[1] See Prof. Wilson, l.c.; and note on Mill's Hist. of India, vol. ii. p. 232.

THE HAMITIC SECTION.

THE EXODUS

AND

THE EGYPTIAN MONUMENTS.

By HENRY BRUGSCH BEY.

His Highness the Khedive of Egypt, Ismael Pasha, has granted me the honour of representing his country at the International Congress of Orientalists in London. On this occasion this enlightened prince, to whom the study which I follow is so much indebted, has wished me to express in his name to the illustrious members of the Congress his most lively sympathies and his sincere admiration for the precious works with which they have enriched science, in bringing to light through their researches the remote ages of those happy countries of the East, which have been the cradle of humanity and the centres of first civilizations.

As His Highness has condescended to choose me for his delegate in London, I owe this distinction less to my modest merits than to the speciality of my last researches on the subject of the history of the Hebrews in Egypt.

Knowing the intense interest with which the English public follow all the principal discoveries in connexion with the sacred traditions of Holy Scripture, His Highness the Khedive has desired me to

offer to the honourable Congress the most striking results of my studies, founded on the interpretation of the Egyptian monuments.

In offering you thus a page of the history of the Hebrews in Egypt, I would flatter myself that I may hope to secure your attention and satisfaction, so as to justify in this manner the great confidence with which His Highness has so kindly honoured me.

I will speak of the Exodus of the Hebrews; but before entering upon my subject, permit me to make one observation. It is to state that my discussion is based on the one hand on the text of Scripture, of which I have not changed a single iota; on the other on Egyptian inscriptions on monuments, explained after the rules of a just critic, entirely devoid of anything of a fanciful nature.

Since nearly for twenty centuries, as I am going to prove, the translators and interpreters of Holy Scripture have wrongly comprehended and wrongly translated the geographical notions contained in that part of the biblical text which refers to the description of the sojourn of the Hebrews in Egypt, the fault, it is certain, is not with the sacred tradition, but with those who, ignorant of the history and the geography of past times, contemporary with the event of the history of the Hebrews in Egypt, have been obliged to reconstruct at all price the Exodus of the Hebrews on the scale of their feeble knowledge, not to say their complete ignorance.

According to Scripture, Moses, after having obtained permission from the Pharaoh of his time to lead the children of Israel to the desert, fatigued by the severe labour of building the two towns of *Pitom* and *Ramses*, departed with his people to the town of Ramses, arrived together at the station of Sukkoth and Etham; at this last encampment he turned, took the way towards Migdol, encamped afterwards against Migdol and the sea (remark that there is not a word about the Sea of Seaweed), opposite the entrance of Khiroth in sight of Baalzephon. Then the Hebrews pass by the Sea of Seaweed (translated by interpreters as the Red Sea), they remain three days in the desert without finding water, arrive at Marah, where the water is bitter, and end by encamping at Elim, the station having sweet water sources and little date woods.

Many savants who have occupied themselves with reconstructing the path of the Hebrews upon that given by Holy Scripture are

of different opinions, and draw different results as to the march of the Hebrews. But all these savants, with the exception of two, unanimously agree that the passage through the Red Sea should be regarded as the most probable point of their route.

I dare not exhaust your patience in enumerating all the roads reconstructed by these savants, who certainly had the best intentions, but who fail in one thing very essential to the rest, the necessary geographical knowledge of ancient Egypt. But more than this, to discover the route of the Hebrews they have consulted Greek and Roman geographers who flourished 1000 years after Moses, and have marked the resting-places of the Hebrews by the Greek and Latin names of the geographers of Egypt, under the reigns of the Ptolemies and Cæsars.

If a lucky chance had preserved the manual of the geography of Egypt, which, according to the texts engraved on the walls of the temple of Edfou, was deposited in the vast library of the god Horus, which had this title "the book of the towns situated in Egypt, with the description of all that took place in them," we might dispense with all trouble of finding the places quoted in Holy Scripture. We should only have to consult this book to know where we are, as regards these Biblical names. Unfortunately this work has perished, with many other papyri, and science has regretted more than once the loss of a book so important as regards the antiquity of Egypt. But this loss is not irreparable! The monuments and the papyri, above all those of the dynasty of Ramessids, contain in themselves by thousands of texts and notices of a purely geographical nature, allusions sometimes of a topographical position, and further still, a very considerable number of inscriptions engraved on the walls of the temple contain pictures more or less extensive, by which we are able to determine in an exact manner the political division of Egypt, and the complete list of the departments of the country, accompanied by a host of curious details.

Here are the detached leaves of the lost book of which I have just spoken. It is necessary to receive it carefully, to compare one with the other, to endeavour to fill up the gaps, and finally to prepare from them the inventory.

Occupied for twenty years with this work, at the commencement of this year I succeeded in putting together the *membra disjecta* of

this grand body of the geography of Egypt, which is composed, according to the index of my collections, of more than 3600 geographical names. In applying the rules of a sound and calm criticism to these rich materials without letting myself be misled by any casual homonymy of foreign proper names, compared with Egyptian names, I have been forced to traverse Egypt from all sides to know the ancient soil in its modern aspect, and to convince myself with my own eyes of the changes of the land, which the soil in different parts of the country has undergone in the course of past centuries.

Having terminated my labours in this manner, which had the sole inconvenience of sometimes exceeding my strength, but which have never fatigued my patience, I have the honour to present the result under the form of a précis to the honourable Congress as a mark of respect and esteem due to the illustrious savants of this assembly.

As I myself experienced a profound satisfaction in having, in some measure, arrived at the aim which I had proposed twenty years ago, it would be, on the other hand, my greatest reward to know by your judgment that I have saved a good part of the lost book of the geography of ancient Egypt. The application of the geographical notions determined and laid down in this precis, which will make the subject special at this Conference, will furnish you with a good proof of the utility and importance which the knowledge of these ideas brings to historical science.

May I be allowed to commence my explanation with a remark relative to the general topography of the country we are about to traverse, to discover and follow the traces of the Hebrews during their stay in Egypt. All the savants who have been engaged upon the same subject agree that this country was situated on the eastern side of lower Egypt, and to the west of the ancient branch, the Pelusiac, which has disappeared from the map of modern Egypt, but whose direction is clearly indicated by the position of the ruins of many large towns anciently situated on the borders. Commencing by the south of the country in question, the town of *An*, the same that Holy Scripture designates by the name of On, we must recognize the position of the Heliopolite nome of classic authors.

After that the mounds of Tell Bast, near the modern towns of *Zagazig*, allow us to fix the ancient site of the town of *Pibast*, a

name that Holy Scripture has rendered by the very exact transcription of *Pibeseth*, while the Greeks have called it *Bubastus*. It is the chief town of the ancient *Bubastite* nome.

Pursuing our road toward the north, vast ruins near a modern town called *Qour* by the Copts, and *Faqour* by the Arabs, settled all the doubts about the situation of the ancient town of *Phacoussa*, *Phacoussai* or *Phacoussan*, which, according to the Greek tradition, was regarded as the chief town of the Arabian nome. It is the same place to which the monumental lists have given the appellation of *Gosem*, a name which is easily recognized in that of *Guésem* of Arabia, proposed by the version of the Septuagint as the geographical translation of the celebrated land of Goshen.

Due north between the Arabian nome, with its chief town *Gosem*, and the Mediterranean Sea, the monumental lists make us acquainted with a district of which the Egyptian name "the point of the north" indicates at once its northern position. Greek authors called it the Sethroïtes nome, which is apparently derived from the appellation *Set ro hâtu*, "the country of the mouths of the rivers," which the ancient Egyptians applied to this part of their country. While classic antiquity employed the name of Héracléopolis parva, that is to say, "little Heracles' town," to designate its chief place; the monumental lists mention the same place under the name of "*Pitom*," adding "in the country of Sukot." Here at once are two names of great importance mentioned in Holy Scripture under the same forms, the *Pithom* and the *Sukkoth* of the Hebrews.

Without stopping for a moment at this curious discovery, I pass to the last district on this side situated in the neighbourhood of the preceding, between the Pélusiac and Tanitic branches of the Nile. It is the nome that the Greek authors, after its chief town, the great city of *Tanis*, have called the *Tanites* nome.

The Egyptian monuments designate it by a compound name, which means "the commencement of the Eastern country," quite in accordance with its topographical position. Its chief town is sometimes called Zoân, sometimes *Pi-ramses*, "the town of Râmses." We still have with us two names which Holy Scripture has very well preserved in the two names Zoân and Râmses of the Egyptian town.

As these new geographical definitions which I have just proposed necessarily lead to a deduction, I do not hesitate for a moment to

declare that I voluntarily take upon myself all the responsibility, both for the accuracy of the philological reasoning as well as for the determination of the geographical position, which I have just brought to your knowledge.

After these remarks I return to Pitom and Ramses. When you have entered at Port Said, from the side of the Mediterranean into the maritime canal of Suez, your vessel traverses from one end to the other a great plain before stopping in the south at the station called by the engineers of the canal El Kantara. But during this passage abandon all hope of gratifying yourself with the prospect of green and smiling meadows, of woods of date and palm trees, which give so picturesque a character, like unto a perfect garden of God, to the interior of Lower Egypt, covered with numerous villages, and intersected by thousands of canals. This vast plain extends on both sides of the maritime canal, so that your eye, which glances over the great space to the extreme edge of the horizon, cannot find a single point of repose. It is a sea of sand, with an infinite number of islets covered with reeds and thorn bushes, separated one from another by lagoons, the banks of which, edged with a sort of white crust, reveal the presence of salt water. Notwithstanding the blue sky, the angel of death has extended his wings over this sad wilderness, where the least sign of life appears to be an event. It is only now and then that you meet with two or three miserable tents of some poor Bedouins, who have wandered to seek food for their lean cattle in this desert.

But the scene changes as soon as the Nile in the two months of January and February has commenced to cover the land of Lower Egypt with its waters. The vast and sandy plains disappear under the surface of immense lakes. Rushes and reeds forming large beds marvellously grow up to a great height, and millions of aquatic birds disposed along the banks of the lagoons, or united in flocks upon the islets of the marsh, begin to fish, disputing with man the rich spoil of the waters. Then come the boats manned with fishers of the Lake Menzaleh, who, during two or three months of the winter, are diligently employed in carrying on their fishing for "the fassikh," salt fish, for the supply of the inhabitants of the Delta and Upper Egypt.

Such is the general character of this country, which I have thrice

traversed, at different periods of the year, and such are the impressions I have brought back from my reiterated visits. Here are these plains at the present day, half desert, half lagoons and marshes, which answer to the territory of the ancient district of the Sethroïte nome, "the eastern point," according to the monuments, the chief town of which was called *Pitom*, the town of *Pithom* of the Bible.

In ancient times this district comprised the two banks of the Pélusiac branch of the Delta, from the western side nearly to the eastern border of the Tanitic branch. The marshes and the lagoons, with a rich vegetation of rushes, reeds, lotus, and above all the papyrus plant, was to be met with on the border of this sea. These places were called by the Egyptian word *athu*, or by the foreign word *Souf*, that is to say, "papyrus marshes" of the Egyptian text. As well as these, there were ponds and lakes, called by Semitic name *Birkata*, which extended themselves nearly to the neighbourhood of *Pitom*. The canals, of which we found two near the town of Pélusium, run in all directions over the district, each bearing a particular name, which are found in a Semitic language spoken by the inhabitants of the district in question. The town of *Pitom*, identical with that of Héracléopolis parva, the chief place of the Sethroïte nome of the time of the Greeks and Romans, was situated half way on the grand route of Pélusium and Tanis; this information, given on the authority of itineraries, forms the only means of determining the position of the bordering district of Tanis towards the frontier.

The Egyptian texts give us evident and incontestable proofs that all this country, which formed the district of the Sethroïte nome, was designated by the name of *Suku* or *Sukot*. The strange origin of this designation is indicated by the monuments, and proved by their conformity with the Hebrew words *sok*, *sukkah*, in the plural *sukkoth*, which conveys in the first sense *tent*. Nothing can displace this particular appellation, and these analogies are found in the names of Scenae Mandrorum, Scenae Veteranorum, Scenae extra Gerasa, given by the ancients to three places situated in Egypt. In these names the word Scenae, "tents," signifies, then, the same as the Semitic-Egyptian word *Sukot*, which recalls to our minds the name of Sukkoth, which Scripture has applied to the first station of the Hebrews when they had quitted the town of Ramses. This name "tents" owes its origin to the encampments of the Bedouin

Arabs, who, with the permission of the "Pharaohs," have established their homes in the vast plains of the country of *Sukkoth*, and who, in the early ages of the history of Egypt, have there put in practice the manners, the customs, and the religious belief peculiar to their race, and diffused the use of Semitic words, which ended by being officially adopted by the Egyptian authorities and scribes.

It is thus that the greater part of the proper names cited on the monuments and in the papyri designating the towns, villages, and canals of the district of *Sukkoth*, and of the adjacent nome of Tanis, can only be explained by means of the vocabulary of the Semitic language. And it is thus that very often the existing Egyptian names have been changed, so that the Semitic name contains the exact translation of the meaning of the Egyptian name. In this case the Semites have employed the same process that the Greeks and Romans employed to render the proper names of the geography of Egypt, by the translation of a word corresponding in their own language. On this occasion the proper names of the divinities of the classical mythology have gone so far as to be placed against the names of the gods and divinities of the Egyptian pantheon. Thus we find in the classic authors such names of cities as Andronpolis ("the town of men"), Gynaicon-poli ("the town of women"), Leontonpolis ("the town of lions"), Crocodilon-polis, Lycon-polis, Elephantine, that is to say, the towns of crocodiles, of wolves, of the elephant, etc., which offer true translations of the corresponding Egyptian names. So also authors speak of towns called Dios-polis, Hermo-polis, Helio-polis, Aphrodito-polis, that is to say, the towns of the gods Zeus, Hermes, Helios (the sun), and of the goddess Aphrodite, to render in Greek the Egyptian names *No-Amon* ("the town of Amon"), *Pi thut* ("the town of Thot"), *Pitom* ("the town of the solar god *Tom*"), *Pi Hathor* ("the town of the goddess Hathor"). The Hebrews have done the same. Thus it was at the entrance of the route which conducted to Palestine, near the lake Sirbonis, a little fortification, to which the Egyptians, already at the epoch of the nineteenth dynasty, have given the name of *Anhu*, that is to say, "the wall" or "the enclosure," a name that the Greeks, according to their custom, had translated by calling *ta Gerrhon*, in the plural *ta Gerrha*. The Hebrews have equally rendered the sense of the Egyptian name, designating the military post on the Egyptian frontier by the name

of *Shour*, which in their language absolutely signified the same thing as the word *Anhu*, and the word *Gerrhon* in Greek, that is to say, "the wall." It is this place *Shour* which is called in Scripture, not only as a frontier place between Egypt and Palestine, but also as the spot, the name of which applied to the eastern part of the desert of the coast of Egypt.

Thus also the Hebrew word Souph, the meaning of which is "seaweed, reeds, rushes, and papyrus plant," the sense of which is made sure by the dictionaries of the Hebrew language, which has been employed to designate a town situated on the Egyptian frontier, at the opposite end of the pharaonic highway, which led to the south of the Dead Sea, equally as it has been employed to give the name to the *yam Souph*, "the Sea of Seaweed," only contains the translation of the Egyptian word *Athu*, which still signifies the same thing as the Hebrew word *Souph*, that is to say, "seaweed or papyrus plant," and which has designated by a general term all the marshes and lagoons of Lower Egypt, characterized by the richness of their vegetation, composed of papyrii and reeds. The Egyptians, on their part, knew so well the sense of the Hebrew word, that they adopted the foreign word *Souph*, instead of the word *Athu* of their own language, not only to express the name of the town of seaweed *Souph* in Hebrew, but also the sea of seaweed, the *yam Souph*, to which we shall recur hereafter.

After this remark, of a philological nature, which has appeared to me indispensable for the understanding of my subject, I return to the town of *Pitom*, the chief town of the country of *Sukot*, upon which the Egyptian monuments furnish us with many curious facts. I commence with the divinity worshipped at *Pitom* and in the district of *Sukot*. Although the lists of nomes and Egyptian texts expressly designate the solar god *Tom*, the same who had splendid temples in *On Heliopolis*, as the tutelar god of *Sukot*, they nevertheless add that the god *Tom* only represents the Egyptian god corresponding to the divinity of *Pitom*, who is called by the name of *Ankh*, and surnamed "the great god." The word *Ankh*, of Egyptian origin, signifying "life," or he who lives, the living. It is the only time a like name for a god which appears to exclude the idea of idolatry is met with in Egyptian texts. And in reality when the presence of the families of the Semitic race, who, at all periods of the history of

Egypt, have resided in the country, including the Hebrews, is taken into consideration, it is impossible to refuse to recognize the traces of a religious remembrance which generally passed into the monumental tradition of the Egyptians. I dare not decide this question, if the god—"he who lives"—of the Egyptian text is identical with the "Jehovah" of the Hebrews. However, all leads to the belief, if it is recalled to mind that the name of Jehovah contains the same meaning as the Egyptian word *Ankh*, "he who lives." According to the monuments, this god, in honour of whom was celebrated a grand festival on the 13th day of the second month of summer, was served, not by priests, as other divinities of the Egyptian pantheon, but by two young girls, sisters, who bore the honorific title of *Ur-ti*, that is to say, "the two queens." A serpent, to which the Egyptian texts gave the epithet "the magnificent, splendid," was regarded as the living symbol of the god of *Pitom*. It bore the name of *Kereh*, that is to say, "the smooth" (Κερϛε calvus, and the Hebrew word גלה "smooth, bald"). Again, this serpent transports us to the encampment of the children of Israel in the desert: it reminds us of the brazen serpent of Moses, to which the Hebrews had presented as an offering the perfumes of incense, until King Hezekiah decreed the abolition of this ancient serpent-worship.

The relation between *Pitom* and *Sukot* does not finish there.

According to the monumental indications, the town of *Pitom*, the capital of the district of Sukot, had a surname which it owed to the presence and existence of its god *Ankh*, "he who lives," and which, in Egyptian terms, was pronounced *p-aa-Ankh*, "the domicile of the god *Ankh*." In accordance with this name the district of *Sukot* was called in another manner *p-u-nt-paa-Ankh*, "the district of the abode of him who lives." Add to this monumental name the Egyptian *sa*, so known to designate the governor of a town or of a district, and you will have the title of *Za p-u-nt-p-aa-Ankh*, "the governor of the district of the abode of him who lives," which a Greek, in the time of the Ptolemies, would have rendered by this translation, the "nomarch of the Sethroïte nome." And now consult Scripture: it will tell you that the Pharaoh of Joseph honoured his vizier with the long title of Zaphnatpaneakh, letter for letter exactly corresponding with the long Egyptian word of which I have just proposed the analysis. Besides, according to the recital of Scripture, when Joseph made himself

known to his much astonished brethren, he said to them, Gen. xlv. 8, —"So now it was not you that sent me hither, but God: and He hath made me a father to Pharaoh and lord of all his house." The first title in Hebrew is pronounced *ab en pirao*. The translators of this passage, commencing with the Septuagint, have believed they can there recognize the Hebrew word *ab*, "father."

The Egyptian texts show us that, far from being Hebrew, the title *ab en pirāo* designated the first employé or officer especially attached to the house of Pharaoh. Several of these precious historical papyri of the time of the nineteenth dynasty, which the British Museum possesses, and of which the texts, under form of simple letters and communications, were composed by the scribes and employés of the court, allude to these *ab en pirāo*, superior officers of Pharaoh, of which the high rank is clearly indicated by the style, full of respect, adopted by the scribes of inferior rank.

All these observations, the number of which I could easily augment by other examples, serve to prove generally the presence of a strange race on the soil of *Sukot*, and particularly to give incontestable evidence of the intimate relations between the Egyptians and the Hebrews. Egyptian texts for use, as well as for internationally speaking the words belonging to their language, furnish us with direct proofs which certify the existence of foreigners in the district of *Pitom*.

The Egyptian texts, at the head of which is the famous papyrus of the British Museum, tell us continually of these *hiṛu-pitu* on the Egyptian officers charged with the superintendence of these foreign races, who resided in the country of Sukot. These same texts acquaint us with the *adon* (a word of entirely Semitic origin) or superior chiefs of *Sukot*, magistrates who served as mediators in the relations with the Egyptian authorities of these people. This service, which was not always of a peaceable nature, was supported by a corps of police (the *Mazaiou*), of which the prefect (the *Ser*) was chosen amongst a number of grand personages of the court of the Pharaohs. The Egyptian garrison of the two fortresses constructed on the frontiers of the nome of *Sukot* watched the entrance and departure of foreign persons in the territory in question. The first, called *Ḫhetam* (that is to say, the fortress of *Sukot*), was situated near the town of Pelusium. It defended the entrance in *Sukot* from the Arabian side. The other, named by a Semitic word *Segor* or *Segol*,

that is to say, the bulwark of *Sukot*, hindered foreigners from crossing the frontier on the south side, and of setting foot on the adjacent district of *Tanis-Ramses*. So that these two places were situated on the two ends of the route which was traversed in the midst by lakes, marshes, and canals—the plain of *Sukot*. The description which a Roman author (Pliny) has left us of the nature of the highways of this country may serve to prove that already at the commencement of our era the high road of the district of Sukot resembled in some manner the road of the present day, which only the Bedouins of the country are able to pass along with their families. As it is easy to conceive beforehand, the marshy district of *Sukot* did not permit, at first, the foundation of towns in the interior of this district. Also the Egyptian texts, according with the indications of classic authors, only speak of the cities and places situated on the frontier. I venture to fix your attention upon that fortress situated on the eastern side of the nome of *Sukot*, on the border of the Arabian desert, in the neighbourhood of a basin of sweet water, and called by its Semitic name, adopted by the Egyptians, *Migdol*, that is to say, "the Tower," and by its purely Egyptian name *Samout*. The situation of this locality is fixed by the position of *Tell es Samout*, a modern name given to certain masses of ruins, and which recalls to mind the ancient appellation of Samout. Already, at the period of the eighteenth dynasty, almost 200 years before the days of Moses, this place was regarded as the most northern point of Egypt, as on the side of the south the town of Elephantine or *Souan* (the Assouan of the present day), the most southern point of the country. When the King Amenophis IV. assembled all the workmen of the country to go from the town of Elephantine up to *Samout* (Migdol), the Egyptian text, which has preserved for us this information, does not say anything else than, in another sense, the prophet Ezekiel (xxx. 10, and xxix. 6) in prophesying to the Egyptians the devastation of their country going from *Migdol* up to *Seve* (Assouan), on the frontier to the country of Kush. While remarking that *Migdol* is the only place of this name I have met with in the geographical texts amongst the number of more than 3000 names, the probability already is that the *Migdol* of the prophet Ezekiel does not differ from the *Migdol* of the Exodus.

It is time to quit the district of Sukot, and to follow Pitom, the

ancient highway which led up to *Zoan Tanis*, the capital of the neighbouring district, a distance of twenty-two Roman miles, according to the itineraries of antiquity. A sandy plain, as vast as it is sad at the present day, named *San*, in remembrance of the ancient name Zoān, and covered with gigantic ruins of columns, pillars and obelisks, statues, sphinx, tablets, and building stones; all these remains, cut in the hardest material of all the granites of Syene, present to you the position of the town of *Tanis*, of which the Egyptian and classical authors agree to give the epithet of a grand and splendid town in Egypt. According to geographical inscriptions, the Egyptians have given to this plain, with the centre of Tanis, the names Sokkot Zoān, "the plain of Zoān," a name the origin of which goes back to the epoch of Ramses II. The author of the seventy-eighth Psalm, in the twelfth and thirteenth verses, used exactly the same expression while wishing to remind the contemporary Hebrews that which God did before their ancestors, "the children of Israel," in Egypt, and "in the plains of Zoān." This remarkable coincidence is not accidental, for the knowledge of the Hebrews in all that regarded Tanis is proved by the notice of an annalist quoted in Scripture, that the town of Hebron was built seven years before the foundation of Zoan.

If the name of *Zoān*, which the Egyptians as well as the Hebrews have applied to this great city, and which means a station where animals are loaded before going on their journey, is of an origin purely Semitic, two other names, equally given to the same place, and inscribed upon monuments discovered at San, reveal to us their origin from the Egyptian language. These are the names of *Zor* and *Pi-rāmses*. The first, *Zor*, sometimes *Zoru* in the plural, which has the meaning of "the strong place" or of "strong places," agreeable to the character of the countries situated towards the east, and furnished with a great number of fortifications, of which Tanis has not been the weakest.[1]

The second appellation, *Pi-ramses*, the town of Ramses, dates from the time of the second king of that name, the founder of all those gigantic buildings, the vast ruins of which still astonish the

[1] The Egyptian name of *Mazor*, applied to this same country, shows us the origin of the Hebrew word given in Holy Scripture to the same region.

traveller at the present day. It was in this new town, which was built quite near the ancient *Zor*, and which is so often mentioned in the papyri of the British Museum, that Ramses II. caused to be erected sanctuaries and temples in honour of a circle of divinities called the gods of Ramses. The King made himself to be distinguished by a religious worship, and the texts of a later period often mention the god Rameses, surnamed "the very powerful." I cannot omit to cite the name of the high priest who presided at the different religious services in the sanctuaries of *Zor Rameses*. According to the Egyptian texts, the priest bore the name of *Khar-tot*, that is to say, "the warrior." The origin of this name is very strange for persons so peaceable, and is sufficiently explained by Egyptian myths about the divinities and the town of Rameses. Except for these religious legends, the interest which attaches to this title is suggested at least by the fact that Holy Scripture gives the same name to the priests whom Pharaoh called to imitate the miracles done by Moses. The interpreters of Scripture agree that the name of *Kartumim* given in the Bible to the Egyptian magicians, in spite of its Hebrew colour, is visibly derived from an Egyptian word. Here this word *Khartot*, which not only furnishes us with the means of discovering the meaning of the word *Khartumim*, but also the new proof of the scene of the interview between Moses and Pharaoh, took place in the town of *Zoan* Ramses.

The Egyptian monuments, especially the papyri, are filled with dates which have reference to the building of the new city of the sanctuaries of Ramses, and the stone and brick work, with which the workmen were over-burdened to finish their task quickly. These Egyptian documents furnish details so precise and so special on this kind of work, that it is impossible not to recognize in them the most evident connexion with the Bible account of the hard servitude of the Hebrews on the occasion of the building of certain constructions at Pitom and Ramses. One must be blind not to allow oneself to see the light which commences to clear away the shadows of thirty centuries, and which allows us to transport to their proper places the events which the good fathers of the Church, excellent Christians otherwise, though bad connoisseurs of antiquity, who would have upset us almost for ever if the monuments of the Khedive and the treasures of the British Museum had not come in good time to our aid.

To displace the position of the town of Ramses, notwithstanding the evidence of the Egyptian documents, would introduce irreparable confusion into the geographical order of the nomes and the villages of Egypt.

It is in this town of Zoān Ramses, that towards the year 1600 B.C., the twenty-second year of his glorious reign, Thothmes III. departed, at the head of his army, to attack the land of Canaan; it is in this town where, in the fifth year of his reign, Ramses II. entered as a victor, after having gained his victories over the Khetien people, in which, six years later, the same Pharaoh concluded the treaty of peace and alliance with the chief of these people. It was this town, of which its great plains served as ground where the cavalry and troops of the king executed their war manœuvres. It is this town, of which the port was filled with Egyptian and Phœnician vessels, which held the commerce between Egypt and Syria. It is this town that the Egyptian texts especially name as the boundary of the proper Egyptian territory, and as the commencement of the foreign soil. It is this town, of which an Egyptian poet has left us a beautiful description, contained in one of the papyri of the British Museum. In the same town Ramessids preferred to reside to receive the foreign ambassadors, and to issue his orders to the officers of his court. Here the Children of Israel experienced the sufferings of their long and cruel slavery; here Moses performed his miracles before the Pharaoh of his time; and, lastly, it is the same town from which the Hebrews departed when they left the fertile land of Egypt.

We will follow them now station by station.

Travellers by land, who would leave Ramses to put themselves *en route* for the eastern frontier, have two roads to follow. The one leads in a north-eastern direction from Ramses to Pelusium, half way they pass by the town of Pitom, situated at an equal distance from Ramses and Pelusium. It is unpleasant, on this route of Pliny, to cross the lagoons, marshes, and the whole network of canals in the country of *Sukot*. According to what the monuments tell us, this way was not very often frequented, it served for ordinary travellers without baggage; while the Pharaohs, accompanied by cavalry, chariots, and troops, preferred the second road, the great Pharaonic highway, the *sikkeh-es-soultanieh* of the Eastern people.

This last is composed of four stations, a day's journey the one from the other. These are *Ramses*, "the bulwark," *Sukot*, *Khetam*, and *Migdol*. We already know the names and the positions of these stations, with exception of the third, *Khetam*. The word *Khetam*, which the Hebrews have rendered *Etham*, has the general sense of "fortress," as I have proved above in distinguishing it from the other Khetam which existed in Egypt, and especially from the *Khetam* in the province of *Sukot*, situated near Pelusium. The Egyptian texts add very often to this word the explanation "that it is situated in the province of Zor," that is to say, Tanis Ramses.

There is not the least doubt of the position of this important situation, of which we even possess a drawing, represented on a monument of Sethos I. of Karnak. According to this representation the place of *Khetam* was situated upon the banks of a river (the Pelusiac branch of the Nile), and the two opposite parts of the fortress are joined by a large bridge—by a *qanthareh* as it is called in Arabic. At a little distance from these two fortresses, and behind them, is found the town, inhabited, and called in Egyptian *Tabenet*. This name calls to mind at once the name of Daphnai, given by the Greek historian Herodotus to an Egyptian fortress, and the following observations are sufficient to furnish the greatest certainty to the proposed indications. First of all, Herodotus speaks of Daphnai conformably with the fortresses, according to the Egyptian representations. He gives them the surname of "Pelusiac," on account of the position of the Pelusiac branch. Herodotus especially mentions that there was in these Pelusiac Daphnai in his days, as in times past, an Egyptian garrison, which guarded the entrance into Egypt from the side of Arabia and Syria. The ruins of these two fortresses, situated opposite one another, are still in existence; and the name *Tell-Defenneh*, which they bear, at once recalls to mind the Egyptian name of *Tabenet*, and that of Daphnai, given by Herodotus. The remembrance of the bridge, the *qanthareh*, which joined the two fortresses, is also preserved to the present day, for the name of *guisr-el-qanthareh*, "the dyke of the bridge," is applied at the present time to a place situated towards the east, at a little distance from *Khetam* —must be regarded as the last reminiscence of the only passage which, in ancient times, allowed of an entrance into Egypt, without wetting the feet, from the western frontier.

Having thus found, by their ancient names, and by their modern positions, the four geographical points which Holy Scripture calls *Ramses*, *Sukkoth*, *Etham* and *Migdol*, situated a day's journey from one another, I hasten to answer the question, if the Egyptian texts prove to us the existence of a highway which, by these intermediate stations of *Sukkoth* and *Etham*, conducted from *Ramses* up to *Migdol*. Once more the response is the most affirmative in the world.

A lucky chance—let us rather say Divine Providence—has preserved to us in a papyrus of the British Museum, the most precious souvenir of the epoch contemporary with the sojourn of the Hebrews in Egypt. It is a simple letter, traced more than thirty centuries before our day, by the hand of an Egyptian scribe, to give his motives for his departure from the royal palace at Ramses, caused by the flight of two servants.

"Thus," he said, "I started from the room of the royal palace, the ninth day of the third month of summer, towards the evening, after the two servants. And I arrived at the bulwark of *Sukot* on the tenth day of the same month. They informed me that they (that is to say, the two fugitives) had deliberated to pass towards the south side. The twelfth day I arrived at *Khetam*. There they communicated to me that the grooms who came from the country [of the lagoons of Suf, as they called it], that the fugitives had crossed the country of the Wall, to the north of Migdol, to the King Seti Meneptah."

Replace in that precious letter the mention of the two servants by the name of Moses and the Hebrews; put into the place of the scribe who pursued the two fugitives the person of Pharaoh, who followed the traces of the children of Israel; and you have the exact description of the march of the Hebrews related in Egyptian terms. Also as the Hebrews, according to the account of the Bible, departed the fifteenth day of the first month from the town of Ramses, our scribe the ninth day of the eleventh month of the Egyptian year quitted the palace of Ramses to prepare himself for the pursuit of the two fugitives.

Also, as the Hebrews the day following their departure arrived at *Sukkoth*, the Egyptian entered *Sukot* the day after his departure from Ramses.

Also, as the Hebrews stopped at *Etham* the third day after their

going forth from Ramses, the Egyptian scribe the third day of his journey arrived at *Khetam*, where the desert commences.

Also, as the two fugitives pursued by the scribe, who dares not continue his way in the desert, had taken their course to the north towards Migdol, and towards the place called in Egyptian "the Wall," in Greek "Gerrhon," in taking Shour in the same sense the Hebrews "turned themselves," as Holy Scripture tells us, towards the north to continue their road, and to enter in the lower lakes of Sirbonis.

Add one single word to these topographical comparisons, and it would be diminishing their value. The truth is simple, it does not want further demonstration.

According to monumental indications, in accordance with what the classic traditions tell us of it, the Egyptian route led from Migdol to the Mediterranean, up to the Wall of Gerrhon (Shour of the Bible), situated at the extremity of the lake of Sirbonis. This last, well known to the ancients, has fallen a long time into oblivion, and yet a century ago a French traveller in Egypt naïvely owned, that to speak of the lake of Sirbonis would be as if you spoke German to the Arabs.

Separated by a tongue of land from the Mediterranean, which offered in ancient times the only Egyptian way into Palestine, this lake, or rather this lagoon, covered with a rich vegetation of rushes and papyri, but in our day almost dried up, hid the unforeseen danger, owing to the nature of its borders and by the presence of its fatal gulfs, of which an ancient classic author has left us the following description.

"On the side of the Levant, Egypt is protected partly by the Nile, partly by the desert, and by the swampy plains under the name of *Barathra* (gulfs). There is in Coele-Syria, and in Egypt, a lake, which is not very large, of a prodigious depth, and in length about 200 stadia. It is called Sirbonis.

"Its basin being like a ribbon, and its sides very wide, it happens that it covers itself with a mass of sand, which is brought there by the continual south winds. This sand hides from sight the sheet of water which intermingles itself with the soil. It is thus that whole armies have been swallowed up in ignorance of the place, and having mistaken their way. The sand slightly trodden on, leaves at first the

trace of the steps, and attracts by a fatal security others to follow, until, warned by the danger, they seek to save themselves at the moment when there remains no means of salvation. For a man thus engulfed in the mud can neither move nor extricate himself, the movements of the body being hindered; neither could he come out of it, having no solid support to raise himself up. This intimate mixture of the water and the sand constitutes a kind of substance on which it is impossible either to walk or to swim. Thus, those who found themselves engulfed there are dragged away to the bottom of the abyss, since the stores of sand sink with them. Such is the nature of these plains, to which the name *Barathra* (gulfs) perfectly suits."

The Hebrews, on approaching this tongue of land in the north-east direction, found themselves thus confronted by these gulfs; for, according to the Egyptian texts, opposite *Khirot* (that is the ancient name which answers exactly to the gulfs in the lake of seaweed) near the place Gerrhon. Thus will be perfectly understood the Biblical expression *Pihahiroth*, a word which literally designates "the entrance to the bogs," and agrees with the geographical situation. This indication is finally pointed out by another place, of the name of Baalzephon, which, according to the discovery of an eminent Egyptologist, Mr. Goodwin, is found in one of the papyri of the British Museum, with its Egyptian writing Baali-zapouna, designating a divinity whose part is not difficult to recognize. According to the indication, extremely curious, by the god *Baalzephon*, "the master of the north," the Egyptian texts represented under his Semitic name the Egyptian god *Amon*, the great falconer, who crossed the lagoons, the master of the northern countries, and above all of the marshes, and to whom the inscriptions give the title of the master of *Khirot*, that is to say "gulf" of the papyrus lagoons. The Greeks, according to their habit, have compared him to one of their corresponding divine types. And it is thus that the god Amon of the lagoons presented himself, from the time of the visits made by the Greeks to this region, under the new form of a Zeus Kasius. The geographical nickname of Kasios given to this Zeus explains by itself the Semitic Egyptian name, the region where his temple was built. It is *Hazi* or *Hazion*, "land of the asylum," which is perfectly in accordance with the position of the sanctuary, situated at the point of the extreme Egyptian frontier on the eastern side.

On this narrow tongue of land, bordered on one side by the Mediterranean, on the other by the lagoon of seaweed, between the point of entrance to the *Kiroth* or gulfs, towards the west, and the sanctuary of Baalzephon towards the east, where this great catastrophe occurred, I cannot but repeat that which I have already said in another place on the same subject.

After the Hebrews crossed on foot the shallows which extend themselves between the Mediterranean Sea and the lake of Sirbonis, a high tide took the Egyptian horsemen and the captains of the chariots of war who pursued the Hebrews. Baffled in their movements by the presence of their frightened horses, and by their chariots of war thrown into disorder, it happened to these soldiers and horsemen, that which in the course of history has sometimes happened, not only to simple travellers, but also to whole armies. The miracle it is true ceases then to be a miracle; but, let us confess it in all sincerity, Divine Providence maintains always His place and His authority.

When, in the first century of our era, the geographer Strabo, a wise man and a great observer, was travelling in Egypt, he entered in his journal the following notice:

"At the time of my sojourn in Alexandria there was a high tide at the town of Pelusium, and near to Mount Casios. The waters inundated the country, so that the mountains appeared to be islands, and the road near to them, leading towards Palestine, became practicable for ships."

Another fact of the same nature is related by an ancient historian. Diodorus, in speaking of a campaign the Persian King Artaxerxes directed against Egypt, makes mention of a catastrophe which happened to his army in the same place:

"When the Persian King," said he, "had united all the troops, he made them advance towards Egypt. Having arrived at the Great Lake, where they found places named 'gulfs,' he lost part of his army, because he was ignorant of the character of this region."

Without wishing to make the least allusion to the passage of the Hebrews, these authors have made known in their notices historical facts which perfectly agree with all that the sacred books tell us of the crossing of the Hebrews through the sea.

Far from diminishing the value of these sacred traditions on the subject of the departure of the Hebrews out of Egypt, the Egyptian

monuments, on the faith of which we are obliged to change our ideas on the passage through the Red Sea—traditions cherished since our infancy, — the Egyptian monuments, I say, contribute rather to furnish us with the most striking proofs of the truthfulness of the Biblical accounts, and thus to re-assure the weak-hearted and the sceptical on the supreme authority and authenticity of Holy Writ.

If for more than eighteen centuries translators have wrongly understood and wrongly translated the geographical notions contained in Holy Scripture, the fault is not with the sacred history, but with those who, not knowing the geography of ancient times, have endeavoured to reconstruct at any price the Exodus of the Hebrews according to the level of their slight knowledge.

Permit me to say the last word upon the country of the march of the Hebrews after their passage across the "gulfs." Sacred books tell us, "Then Moses made the Israelites to go forth, and they drew towards the desert of Shour; and, having marched three days by the desert, they did not find any water: from thence they came to Marah, but they could not drink the waters of Marah because the waters were bitter. For this reason the place was called Marah, which is bitter. Then they came to Elim, where there are twelve wells of water and seventy palm trees, and they camped there near the waters."

All these indications agree, as may be expected beforehand, with our new ideas on the subject of the march of the Jews. After having reached the Egyptian fortress, close to the sanctuary of Baalzephon, situated on the heights of Mount Casios, the Hebrews found themselves in front of the highway which led from Egypt to the country of the Philistines. Agreeably to the orders of the Eternal, who forbad them to follow this road, they turned to the south, and thus arrived at the desert of Shour. This desert, that is to say the Wall, called after a place named in Egyptian "the Wall," and in the Greek "Gerrhon," a word which equally signifies "the Wall," lay to the east of the two districts of Pitom and Ramses. There was in this desert a road, little frequented, leading to the Gulf of Suez in our time, a road the Roman author Pliny has characterized in the following terms: "*Asperum montibus et inops aquarum*," that is to say, mountainous and deprived of water.

The bitter waters of the place Marah are recognized in the bitter

lakes of the Isthmus of Suez. Elim is the place which the Egyptian monuments designate by the name of *Aa-lim* or *Tent-lim*, that is to say, "fish town," situated near the Gulf of Suez on the northern side.

When the Jews arrived at Elim, the words of Scripture—"but God made the people make a circuit by the way of the desert, by the sea of seaweed"—were finally confirmed.

To follow the Hebrews, station by station, until they arrived at Mount Sinai, is not our task; it is beyond this Conference. I can only say that the Egyptian monuments contain all the materials necessary to find again the road, and to place against the Hebrew names of the different stations their corresponding Egyptian names.

DES MESURES ÉGYPTIENNES,

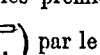
Résultat des études du Papyrus mathématique du Musée Britannique.

par

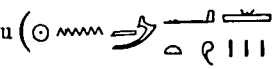
Mr. le Professeur A. EISENLOHR,

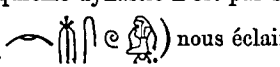
de l'Université de Heidelberg.

Nos connaissances des mesures de l'ancienne Égypte, jusqu'ici encore très imparfaites, seront augmentées considérablement par le papyrus mathématique, nommé Papyrus Rhind d'après son ancien possesseur. De ce papyrus Mr. le Dr. Birch a donné une brève notice dans la Zeitschrift für aegyptische Sprache, 1868, p. 110). Il y a deux ans lors de mon séjour à Londres que je trouvais l'occasion de prendre notice de ce document. Depuis ce temps j'ai fait ce papyrus l'objet d'une étude sérieuse et j'espère en peu d'en publier une traduction avec commentaire. Pour le moment, Messieurs, je vous propose de vous communiquer quelques renseignements sur la métrologie égyptienne fondés sur ce document.

Quant à l'âge du papyrus mathématique, la preface à la première page du papyrus nous donne d'excellents renseignements. On y lit: "Cet écrit a été rédigé l'an 33, mesori (tel ou tel) sous le roi Raauser ( ) d'après le modèle d'anciens écrits faits aux temps du roi (les premiers signes de son nom manquent) . . atu (. . ) par le scribe Aahmesu a été faite cette copie."

Les mots "par le scribe Aahmesu" ne se rapportent pas à la rédac-

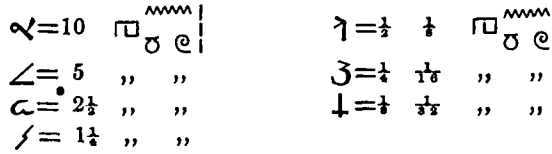
tion des anciens écrits, dont parle le texte, mais à la copie, qui a été faite sous le roi Raauser. Peut-être nous possédons aussi l'ancien original même dans un rouleau de cuire, qui se trouve également au Musée Britannique et contient à ce que m'a dit notre président, Mr. le Dr. Birch, un sujet pareil. Mais ce rouleau a resisté jusqu'ici à tous les efforts de déroulement. Que notre papyrus est une copie, et pas l'original, c'est confirmé par une foule de fautes d'écriture, des lacunes et des liaisons de choses, qui n'ont pas de rapport entre elles. Le deuxième nom royal dont la première partie est effacé se lisait probablement Ra-en-matu () ce qui correspondrait, moins les marques du pluriel, au nom du roi Amenemha III. de la 12 dynastie (environ 2000 a. Chr.).

Ce serait sous son gouvernement, que l'écrit original aurait été rédigé. Jusqu'ici on n'a pas encore trouvé un roi Raauser dans les listes royales. Penser ici à Raenuser (No. 30 de la liste de Seti à Abydos) de la cinquième dynastie n'est pas bien possible. Le nom du scribe Aahmesu () nous éclaircira peut-être sur la date de la rédaction de la copie. Le nom Aahmes appartient à un roi de la 17 dynastie et les Égyptiens aimaient prendre leurs noms propres d'après les noms des rois régnants ou décédés depuis peu. En admettant cela l'original du papyrus aurait été rédigé environ en 2000 a. Chr., la copie en 1700. L'écriture assez archaique en serait en parfait accord.

Des Mesures de Capacité des Céréales.

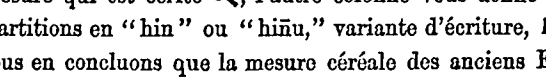
Le papyrus mathématique ayant en vue spécialement des intérêts pratiques et consistant, comme les écritures mathématiques d'Héron d'Alexandrie d'une série de problèmes, ayant rapport à la vie sociale et avec prédilection à l'agriculture, on ne peut-être étonné que les mesures de blé y sont appliquées fréquemment. Il serait assez difficile de fixer le rapport de ces mesures entre elles ainsi que leur valeur absolue, si le papyrus même ne nous en prêtait un excellent moyen. A la page 18 à 20 de ce document se trouve une table comparative des mesures céréales avec la mesure "Hin," une mesure spécialement, mais pas exclusivement, appliquée aux liquides. Or la capacité du "Hin" a été déterminé par Mr. Chabas d'après des vases, inscrits de

leur calibre en "Hin," et d'après les recettes d'Edfou du parfum Kyphi, publiées par Mr. Dümichen, dans lesquelles un "Hin" de vin ou d'eau est fixé à 5 "Tenu." La valeur du "Tenu," connue par le poids de 5 "Kat" égal à un demi "Tenu" de la collection du feu Mr. Harris pour 90·717 grammes, a fourni à Mr. Chabas la valeur du *Hin* à 0·455 jusqu'à 0·46 litres. J'ai inscrit sur cette table le commencement du tableau comparatif, que j'ai trouvé au Papyrus mathématique:

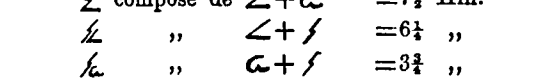


Il vous sera connu que les Egyptiens n'aimaient pas à se servir d'autres fractions que de celles qui ont le nombre un pour numérateur (Zähler) à la seule exception de $\frac{2}{3}$. S'ils voulaient, par ex., exprimer $\frac{1}{8}$, ils écrivaient $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$.

L'une de ces colonnes, celle de la gauche, vous montre les partitions d'une mesure qui est écrite ∝, l'autre colonne vous donne la valeur de ces partitions en "hin" ou "hinu," variante d'écriture, 10, 5, $2\frac{1}{2}$, $1\frac{1}{4}$. Nous en concluons que la mesure céréale des anciens Egyptiens équivalent à 10 "Hin" (ce sont 4·5 litres) était divisée en $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$, $\frac{1}{64}$. Dans la suite du tableau comparatif nous trouvons des autres signes, qui sont composés de ces premiers éléments, également exprimés en *Hin*. Les voilà:



Au même tableau nous empruntons encore d'autres signes d'une valeur plus petite. Ces sont les suivants:



Nous pouvons encore compléter ce tableau par d'autres signes pris des différents passages du même papyrus:

$\rangle = \frac{1}{2} \cdot \frac{1}{320}$ $\curvearrowleft = \frac{1}{2} \cdot \frac{1}{32} = \frac{1}{64}$ Hin.

$\times = \frac{1}{4} \cdot \frac{1}{320}$ $\curvearrowleft = \frac{1}{4} \cdot \frac{1}{32} = \frac{1}{128}$,,

$\curlywedge = \frac{1}{8} \cdot \frac{1}{320}$ $\curvearrowleft = \frac{1}{8} \cdot \frac{1}{32} = \frac{1}{160}$,,

$\mathfrak{Z} = \frac{1}{8} \cdot \frac{1}{320}$ $\curvearrowleft = \frac{1}{8} \cdot \frac{1}{32} = \frac{1}{160}$, ,,

Le résultat scientifique de cette liste consiste en ce que nous apprenons que les Égyptiens avaient une mesure pour les céréales contenant $4\frac{1}{2}$ litres, divisée en $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{32}$, $\frac{1}{64}$, et une autre mesure, le 320ième de la première dont on avait aussi la pluralité $\frac{2}{320}$, $\frac{3}{320}$, $\frac{4}{320}$, et les fractions $\frac{2}{3}$ de $\frac{1}{320}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6} \cdot \frac{1}{320}$, et ainsi de suite.

Le signe hiératique $\curvearrowleft$ correspond au signe hiéroglyphique qui représente un *boisseau*. Nous le trouvons fréquemment employé dans le grand calendrier de Medinet-Abou, et aussi dans les fragments du massif de Karnak, qu'on appelle Table statistique. Mr. Dümichen voulait donner à cette figure la prononciation *ša*. Il prend cette mesure pour le quart d'un "*Tama*" et pour le double du "*Dena*." Le papyrus mathématique ne connait ni *Tama*, ni *Dena*, mais il prête à ce signe du boisseau la prononciation *beša* (cf. Taf 18 et 19, No. 71–78 de ma traduction); —Quant à la mesure représentée par le point nous en trouvons le nom également dans le texte du papyrus. Il se lit *ro* et s'écrit de cette manière .

Mes savants confrères me demanderont sans doute: quel est le sens de ce tableau comparatif? De quelle sorte sont ces mesures, comparées avec la mesure *Hin*? On pourrait d'abord croire, qu'une de ces colonnes (celle à gauche) consistait en poids et l'autres en mesures de capacité, mais ce n'est pas possible, parcequ'aucune substance n'est mentionnée dont tel poids serait égal à tel volume et chacun sait que le volume des substances différentes varie selon le poids. C'est pourquoi notre tableau ne peut-être autre chose qu'une comparaison de deux mesures de capacité, dont l'un, le Bescha, appartenait aux céréales, et l'autre, le *Hin*, aux liquides.

Du Bescha on avait aussi les pluralités 5 Bescha, 6 Bescha, 7 Bescha, 8 Bescha. Dix Bescha | avaient un nom particulier, le nom *Piro*, et il existait aussi une mesure contenant cent Bescha, dont

le nom ne m'est pas certain. Cette dernière mesure avait les partitions $\frac{1}{2}$ >, $\frac{1}{4}$ ×, et $\frac{1}{3}$, correspondant à 50, 25, 33$\frac{1}{3}$ Boscha.

Résumons nos resultats. Nous avons:

1) Une mesure, dont j'ignore le nom, peut-être
an=10 Piro=100 Bescha=1000 Hin=460 Litres.

2) piro |. = 10 Bescha= 100 Hin= 46 Litres.

3) Bescha= 10 Hin= 4·6 Litres.

4) ro= $\frac{1}{32}$ Hin.

La mesure de 460 litres n'est pas non plus la plus grande mesure, dont les calculs du papyrus mathématique font usage. C'est la partie la plus intéressante de ce papyrus, dont nous puisons la connaissance d'une dernière mesure pour les céréales. Vous me permettrez peut-être, Messieurs, de vous faire pénétrer un peu dans le fond du papyrus. Nous trouvons là une série de problèmes, qui cherchent à fixer le calibre de certains grands vases, de cuves ou de magasins servants pour contenir des céréales. Ces vases étaient de forme différente. En partie il avaient une base ronde, en partie une base carrée. Il s'agit de déterminer leur capacité pour une certaine mesure de froment. Les dimensions de ces vases sont données en aunes égyptiennes, dont nous savons par l'excellent mémoire de Mr. Lepsius, que l'étendue est de 0·525 mètres. Comme nous le ferions nous-mêmes on calcule d'abord l'area de la base. Pour trouver l'arène d'une base carrée on n'a qu'à multiplier les côtés, dont l'extension est donnée en aunes. Mais pour les vases de base ronde, c'est plus difficile. Vous savez, Messieurs, que pour obtenir l'arène d'un cercle nous multiplions le radius au carré ou ce qu'est la même chose la moitié du diamètre au carré avec un nombre défini que nous appelons π:

$$\pi r^2 \text{ ou } \frac{\pi \delta^2}{4}$$

c'est la formule pour trouver l'arène d'un cercle. Le chiffre pour π est, comme on sait, 3·14. . . Nous ne pouvons supposer que les anciens Égyptiens dans les temps reculés de la rédaction de notre papyrus (2000 a. Chr.) avaient eu déjà une formule aussi exacte de la circonférence d'un cercle. Mais ils se servirent d'une formule qui s'approche de plus près de la solution du problème de carrer un cercle. C'est la formule $(\frac{8}{9}\delta)^2$, si δ est le diamètre, qu'ils appliquaient pour trouver

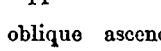
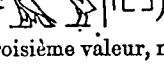
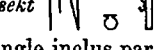
l'arène du cercle. Ainsi si le diamètre du cercle est 9 on construit d'après notre papyrus un carré égal à ce cercle en prenant pour le côté du carré huit parties de ces 9. Cela est représenté par un dessein qui se trouve au bas du papyrus

Exprimée en chiffres, la différence entre le nombre de Loudolf et le nombre des Égyptiens semble assez grande 3·16 au lieu de 3·14, les Indiens avaient trouvé 3·1416 Archimède 3·142. Mais pour juger avec équité il faut considérer que les Egyptiens ne cherchaient pas à trouver l'extension de la circonférence en rapport au radius, mais à construire moyennant le diamètre du cercle une figure carrée du même contenu.

Ayant trouvé par ces deux formules la base d'un vase conique et la base d'un vase carré, il semble qu'il ne leur restait pas faire autre chose que de multiplier l'arène de la base avec la hauteur. Mais ce n'est pas ainsi que l'a fait notre calculateur. Au lieu de faire la multiplication avec la hauteur, il prend $1\frac{1}{2}$ de la hauteur. Ainsi si la base a 100 aunes carrés et la hauteur 10, il ne multiplie pas 10 à 100, mais 15 à 100. Je ne puis m'expliquer cela autrement que par la forme singulière des vases ou des magasins de blé dont se servaient les Egyptiens. Si vous regardez les illustrations de ces cuves dans l'œuvre splendide des Denkmäler ou dans les Études de Mr. Pleyte, vous verrez que ces cuves n'avaient pas des côtés perpendiculaires, mais des côtés obliques, de cette forme environ . Nous pouvons très-bien admettre qu'à cause de cette forme singulière des vases la multiplication avec $1\frac{1}{2}$ de la hauteur donnait le volume assez exact.

Pour l'Égyptien qui était homme de pratique et pas homme de théorie, il ne suffit pas de savoir le volume de sa cuve en cubes d'aunes, mais il lui semblait plus nécessaire d'en connaître la capacité pour tel ou tel quantité de blé. Pour trouver cela, il divisait le nombre obtenu par son calcul par le nombre 20 et cela lui donne la capacité de la cuve ou du magasin en une certaine mesure de blé. Il n'est pas difficile d'extraire de ces calculs le volume de cette mesure de blé. L'aune égyptienne ayant 0·525 mètres, une cube d'aune contient 144·7 litres, et 20 fois de plus, c'est à dire 2894 litres est le volume de cette plus grande mesure de blé. Cette mesure ne semblant pas en rapport avec les autres mesures de 460, 46 et 4·6 litres, que nous avons traités d'abord, avait peut-être 64 fois la mesure de 46 litres.

Messieurs, je devrais encore parler des mesures de longitude simples

et carrées, servant à calculer l'étendue des champs, qui sont employées par l'auteur du papyrus mathématique. Mais cela m'entraînerait dans une investigation un peu longue et j'ai déjà assez abusé de votre patience en vous entretenant d'un objet aussi aride. Pourtant je ne puis m'empêcher de dire un mot sur la méthode employée dans le papyrus pour déterminer la hauteur et la declivité des pyramides. Cela se fait aujourd'hui très-simplement par les règles de la trigonométrie, mais aux temps des anciens Pharaons on ne peut s'attendre à cela. Cépendant on trouve dans les problèmes traitants des pyramides une idée de la méthode trigonométrique. On se proposait de trouver moyennant la base, qu'ils appellaient *ucha tebt* () et moyennant la ligne oblique ascendante, qu'ils appellaient *piremus* (), où je vois l'origine de la dénomination πυραμις, une troisième valeur, nommée *sekt*  qui correspond à ce que nous appelons le cosinus de l'angle inclus par les deux lignes données. Ce cosinus est exprimé dans les fractions de l'aune, les *schop* .

La base *b* ayant 360 aunes, la ligne ascendante *a* 250 aunes, il divise la moitié de 360 c'est à dire 180 par 250, ce que fait $\frac{1}{2}$, $\frac{1}{8}$, $\frac{1}{\overline{50}}$ d'une aune; changeant ces fractions d'aunes en *shop* (l'aune avait 7 *shop*) il vient à $5\frac{1}{28}$ *shop* pour le *sekt*, le cosinus de l'angle inclus.

J'ajoute qu'une pyramide de 360 aunes de base et de 250 aunes d'arête inclinée ne se laisse pas s'exécuter, parceque la moitié de la base au carré divisée par l'arête au carré doit toujours être moins que 2, ce que n'est pas le cas avec $\frac{180^2}{250^2}$.

Messieurs, arrivé à la fin de mon discours, je sens le devoir de vous remercier de la patience avec laquelle vous m'avez suivi dans les détails de la métrologie égyptienne, je ne me flatte pas d'avoir pu vous inspirer un intérêt pour cette matière prosaïque, mais je serais bien content si j'ai réussi de fixer votre attention à un des livres les plus merveilleux de l'antiquité, le papyrus mathématique du Musée britannique.

POINTES DE FLÈCHES EN SILEX DE OUARGLA.

Camp devant Tougourt, 25 *Mars*, 1872.

A Monsieur le Ministre de l'Instruction publique.

Monsieur le Ministre,

Durant la période douloureuse de l'envahissement de la France, les idées étaient naturellement portées ailleurs qu'aux recherches scientifiques, et il est probable que tous les correspondants du ministère avaient remis, comme moi à des temps meilleurs le cours de leurs études favorites.

Depuis, nous avons du entrer en expédition, sous les ordres de M. le Général de Lacroix, pour étouffer dans son foyer l'insurrection la plus formidable que les annales Algériennes aient eûes jusqu'à ce jour à enrégistrer.

Depuis huit mois, notre colonne expéditionnaire a parcouru successivement les montagnes de la Kabilie, la région des plateaux du Tell, et elle vient enfin de terminer ses opérations dans l'extrême sud de la province de Constantine, au Souf, à Tougourt et à Ouargla, où elle a rétabli le calme après l'être emparé de Bou-Mezerag el Mokrani, l'un des principaux chefs de la révolte.

Mais mon but n'est point de vous faire ici un rapport sur les évènements militaires ou politiques qui viennent de se produire, et si j'ai dit quelques mots de notre expédition, c'est afin d'expliquer les circonstances qui m'ont mis à même de faire, dans l'extrême sud, certaines découvertes fort interessantes au point de vue ethnographique et archéologique.

Il y a une dixaine d'années, un archéologue anglais, M. Cristy, commençait avec moi les premières fouilles de dolmens et autres mon-

uments de forme dite Celtique de l'Algérie, dont j'ai signalé à cette époque le résultat satisfaisant (Société archéologique de Constantine, Mémoires, 1863). M. Cristy attachait surtout une grande importance à la découverte des silex taillés ayant servi à un usage quelconque aux populations des âges primitifs. Il me montra une collection fort curieuse de ces silex, sortes de types ou modèles différents, qu'il avait recueillés un peu partout, dans ses nombreuses et lointaines explorations, en Europe, en Asie et en Afrique.

Depuis cette époque, j'ai, à mon tour, dans toutes mes courses dans la province, cherché des silex taillés; il s'en trouve en tous lieux, dans les montagnes comme dans la plaine, mais il eût fallu beaucoup de complaisance et d'efforts d'imagination pour reconstituer une forme exacte ou attribuer une destination spéciale aux fragments que j'avais vus jusqu'ici. C'est autour de Ouargla, à 200 lieues environ du littoral et au milieu des dunes de sable, qu'il m'était réservé d'obtenir un succès complet et convaincant.

Entre la ville Saharienne de Negouça et celle de Ouargla, à 4 kilomètres environ avant d'arriver à cette dernière, en traverse de grandes dunes de sable sur lesquelles brillent au soleil une infinité d'éclats de silex blancs. Naturellement, j'explorai ce quartier pendant la marche de la colonne et ou doit juger de ma satisfaction lorsque je pres constater l'existence, au pied de la dune de sable, de l'emplacement d'un ancien atelier où les silex taillés couvraient litteralement le sol sur un espace d'une dixaine de mètres carrés.

La récolte fut abondante; plus d'une centaine d'échantillons assez bien conservés étaient en ma possession. Je fis immédiatement part de ma trouvaille au Général de Lacroix, mon chef, et à mes amis, le docteur Reboud et M. le Vétérinaire Souvigny, qui glanèrent aussi des silex taillés.

Ceux là même qui souvent avaient souri et m'avaient plaisanté à propos de mes recherches *de petits couteaux perdus par les anciens*, étaient obligés de se rendre à l'évidence; les plus incrédules étaient convaincus en examinant cette quantité d'objets aglomérée sur un seul point, œuvre palpable de l'industrie humaine et non point produite par le fait d'un hazard capricieux.

Ces silex sont généralement taillés en pointes de flèches. La dessin ce joint l'indique suffisamment, et, pour plus d'exactitude dans l'image de la forme et de la dimension, j'ai appliqué les objets eux-mêmes sur

le papier et en ai suivi fidèlement les contours avec la pointe du crayon. Le No. 1 est la pointe de flèche du type le mieux réussi, les autres sont généralement à trois facettes, c'est-à-dire presque triangulaires comme nos lames d'épée. Un côté est entièrement plat et les deux autres forment une arête plus ou moins vive et saillante dont les bords sont tranchants.

La matière est un silex blanc, souvent transparent et quelquefois teinté de rose ou de brun. Les éclats en sont nets. Des échantillons aigus, plus gros que les pointes de flèches, devaient avoir la destination d'être montés au bout de lances ou de bâtons servant d'armes défensives, tandisque les autres s'adaptaient aux armes de jet. Nous n'avons pas besoin de rappeler ici que l'arc et la flèche—mais celle ci montée en fer—sont aujourd'hui encore en usage chez les Touareg de notre Sahara central.

Les échantillons que nous possedons permettent de suivre la fabrication de la pointe de flèche depuis son extraction de la gangue jusqu'à son achèvement complet.

Sur les traces de pareilles curiosités, j'ai continué mes recherches autour de Ouargla, entr'autres au djebel Krima où les silex taillés se trouvent également.

A quel peuple faut-il maintenant attribuer ces vestiges d'un âge et d'une civilisation primitive? Faut-il les faire remonter aux Ethiopiens d'Hérodote, aux Gétules de l'époque romaine? Les ouvrages des auteurs anciens me manquent ici pour me livrer à des recher[ches] sérieuses et tenter de résoudre cette question. Nous allons n[ous bornons] à rappeler ce que la tradition locale, qui ne remonte pas [très haut] au sujet des anciens habitants du pays.

Sept grands centres de population existaient [dans le] Krima. La contrée aujourd'hui aride et [désolée] arrosée par de grands cours d'eau, l'Oue[d] Mïa, qui ne coulent plus aujourd'h[ui] connaissable. Toute la contrée étai[t] troupeaux de gazelles, des bandes d'au[truches] leur offrait alors des herbages abondant[s] et des pluies périodiques. Et en effet, le[s] vraissemblance de cette tradition, en nous [montrant] infinité de débris d'œufs d'autruche provena[nt] ces grands échassiers. Aujourd'hui c'est dés[ert]

plus. La température se serait considérablement modifiée et aurait amené par ses conséquences, un bouleversement complet dans la nature du pays.

La population la plus ancienne que signale la tradition locale, s'appelait les Sedrata. Quelle est l'origine de ces Sedrata ? Faut-il voir en eux la fraction des Renata, race berbère à laquelle Ibn-Khaldoun attribue la fondation d'Ouargla ? Je le répète, dans mon modeste bagage de campagne, je n'ai ici aucune ouvrage à consulter.

En tous les cas, les vestiges laissés par cette population sont nombreux; j'ai parcouru les ruines qui jouchent le terrain sur des espaces considérables, entre le djebel Krima et Ouargla. On voit par des tronçons de vieilles racines, que des plantations importantes de dattiers y existaient autour. Le djebel Krima qui s'élève au milieu de la plaine sablonneuse, à une douzaine de kilomètres au Sud de Ouargla, est une vaste table gypseuse d'une centaine de mètres de hauteur et d'une vingtaine d'hectares de superficie. C'est le plus bel observatoire que l'on puisse imaginer pour étudier l'horizon et la direction que le vent imprime aux dunes mouvantes de sable qui à l'œil, du haut de cette vigie naturelle, produisent l'effet d'autant de lames ou de vagues de la mer allant se briser contre une plage. Sauf la couleur du sable, l'effet d'optique est exactement le même et d'un aspect saisissant. J'aurais voulu assister sur ce sommet à l'une de ces tempêtes de vent et de sable qui, à deux ou trois reprises, ont envahi notre camp [illegible]lant le séjour d'un mois que nous avons fait à Ouargla. Les [illegible]ommençaient à *fumer*, comme disent les indigènes, c'est à dire [illegible]ière de sable impalpable, s'élevait flottante, semblable à [illegible]au bout d'un instant, le ciel devenait jaune et noir, [illegible]ir à deux pas de soi. Une poussière aveuglante [illegible] un vent violent, ne permettait aucun [illegible]aravane ou à la colonne de troupes, [illegible]mpêtes Sahariennes. Il faut arrêter [illegible]que le beau temps revienne. Si on [illegible]it perdu.

[illegible]orte de ruines d'habitations. Les rues [illegible]rs des maisons, construites en mortier de [illegible]connaissables; les éclats de silex y sont [illegible]ssons d'une poterie rougeâtre d'une ténacité [illegible]ilieu du plateau est un large puits qui n'a

pas moins de 112 mètres de profondeur. Comme les abords de la table sont partout taillés à pic, sauf un ou deux passages où existent des rampes fort raides, les premiers habitants de cette ville aérienne—les Sedrata de la tradition locale peut-être—y trouvaient un refuge assuré contre leurs ennemis.

Dernièrement le Chérif Bou Choucha, après lequel nous courions dans les sables, a eu un instant la pensée d'établir son quartier général sur ce point, d'où il aurait pu nous voir venir de loin. Déjà il avait fait recurer le puits et construire deux montants à son orifice, pour supporter la poulie destinée à faciliter le puisage de l'eau nécessaire à son monde. Mais il jugea plus prudent de continuer à vivre en rase campagne et de n'être limité dans ses courses que par l'horizon. Enfin les centres que je viens d'indiquer n'existent plus, peut-être les descendants de ceux qui les peuplèrent se sont-ils depuis dispersés dans les oasis d'Ouargla, de Negouça, d'El Goléa et du Mazab; c'est probable, la tradition locale semblerait, du reste, l'indiquer suffisamment.

La ville d'Ouargla, qui ne compte pas moins de 1400 maisons dans son enceinte n'a tout au plus que 2000 habitants. La cause du dépeuplement tient aux émigrations pour échapper aux déprédations et à l'oppression des nomades. Elle tient aussi à ce que l'élément nègre ne lui apporte plus son contingent depuis que la conquête française a aboli le commerce des esclaves nègres amenés du Soudan par les caravanes des Touareg. Les sédentaires ou habitants des oasis, provenant du croisement avec la race nègre, dont généralement ils ont conservé la couleur, sont doux et patients; ils sont devenus les clients, les serfs en un mot, du nomade, qui se complait dans la vie pastorale, patriarcale et indolente. Le sédentaire a conservé de ses ancêtres des idées superstitieuses résultant d'un mélange de croyances payennes et musulmanes, souvent incomprises et qu'ils ne savent pas expliquer. Ils suspendent dans leurs maisons et même dans leurs jardins, des os, des cornes et des crânes de différents animaux, pour se préserver du mauvais œil. Parfois, c'est l'image de la main, aux cinq doigts déployés, destinés à repousser l'influence de tout maléfice.

Mais ce qui nous a le plus frappé, ce sont les dessins ou moulures en plâtre, appliquées en relief au dessus du tympan de la plupart des portes d'habitation. Ces figures ne sont autres que cet emblème de la divinité qui sert de frontispice aux pierres funéraires numidiques

décrites si souvent par mon ami le docteur Reboud. (Vois croquis, No. 2.)

Serait-ce un vague souvenir des croyances des premiers peuples puniques qui, par l'effet de l'habitude, se serait transmis de génération en génération jusqu'à nos jours, chez ces habitants de l'ancienne Gétulie? Seraient-ils contemporains des hommes combattant avec la flèche à pointe de silex? C'est fort possible! En tous les cas, le docteur Reboud qui à vu comme moi et avec moi ces images de la divinité païenne, ne manquera pas, j'en suis persuadé, de signaler leur existence avec toute la compétence que nous lui connaissons dans ce genre d'études.

CHARLES FERAUD,

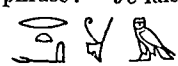
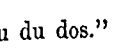
INTERPRÈTE PRINCIPAL DE L'ARMÉE,
CORRESPONDANT DU MINISTÈRE DE L'INSTRUCTION PUBLIQUE
POUR LES TRAVAUX HISTORIQUES.

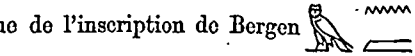
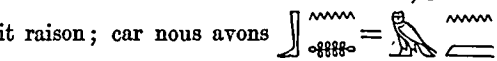
DEUX
COMMUNICATIONS EGYPTOLOGIQUES.

PAR

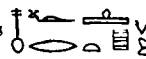
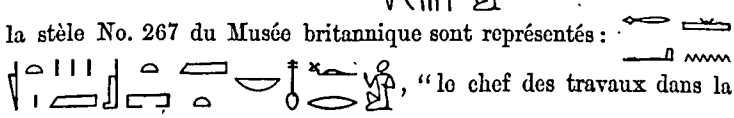
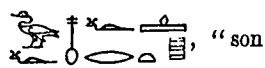
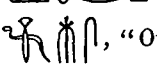
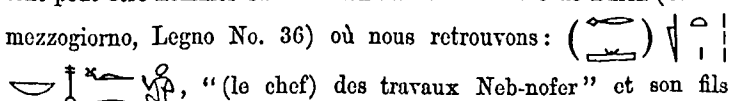
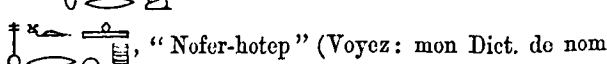
J. LIEBLEIN.

Ce sont seulement deux petites communications que je demande la permission de faire au Congrès.

A Bergen, une ville Norvégienne, il se trouve une caisse de momie d'une époque recente, probablement du temps Romain. L'inscription de cette caisse est remarquable en ce qu'elle est, pour quelques parties au moins, écrite exclusivement en hiéroglyphes phonétiques, sans des signes idéographiques. La décsse Nout p. ex. est appelée: , "Nout, la grande déesse, qui a enfanté les dieux;" ici le mot , "les dieux," est écrit sans le déterminatif ordinaire: . Cependant, c'est sur une autre phrase de cette inscription que je veux attirer l'attention des savants. La déesse que j'ai déjà nommée, dit: "Je viens à toi, Osiris, je suis ta mère Nout qui s'étends sur toi, *je fais ta protection*, ou, je suis derrière toi, je donne le souffle du nord dans ton nez," etc. Ici le phrase: "Je fais ta protection," ou, "je suis derrière toi" est écrite:  ; est sans doute une recente forme pour  , "le lieu du dos." Mr. Brugsch a émis l'opinion, il y

a long temps,[1] que est conservé dans le copte ⲙⲉⲛⲉⲛⲥⲁ, *post*, et la forme hiéroglyphique de l'inscription de Bergen  , qui est tout-à-fait identique avec le copte ⲙⲉⲛⲉⲛⲥⲁ, prouve que Brugsch-Bey avait raison; car nous avons  = ⲙⲉⲛⲉⲛⲥⲁ.

A cette occasion je veux faire observer que les personnages principaux du Papyrus Salt sont probablement nommés sur une stèle du Musée britannique No. 267, dont j'ai donné la généalogie dans mon Dictionnaire de noms No. 684.

Dans le Papyrus Salt sont nommés: "le chef des travailleurs Neb-nofer," son fils  , "Nofer-hotep," et un personnage appelé , "Ouat'-mès." Sur la stèle No. 267 du Musée britannique sont représentés:  , "le chef des travaux dans la maison de la vérité Neb-nofer,"  , "son fils Nofer-hotep," et un personnage nommé  , "Ouat'-mès." Dans les deux monuments la filiation, les titres et les noms sont les mêmes; il y a donc lieu de croire que les personnages sont identiques, ou qu'ils au moins appartenaient à la même famille. Ces mêmes personnages sont peut-être nommés sur un monument du Musée de Turin (Sala a mezzogiorno, Legno No. 36) où nous retrouvons:  , "(le chef) des travaux Neb-nofer" et son fils  , "Nofer-hotep" (Voyez: mon Dict. de noms No. 929). Sur le monument de Turin le roi , Mi-Amon Rameses," est nommé.

[1] Zeits. der ägypt. Sprache für 1864, p. 7.

THE ARCHÆOLOGICAL SECTION.

ADDRESS

BY

M. E. GRANT DUFF, Esq., M.P., President.

The Section which meets to-day deals with no narrower a subject than the art, architecture, and archæology of all Eastern countries. A paper on the Mosque of St. Sophia, a paper on the Temples of Kioto, a description of the jewelry of Vizianagram and of the Palace of Khiva, would quite legitimately belong to it. The range of possible topics being thus so enormous, anything like a general introduction to the subject before us would be absurd. A far less ambitious attempt is likely to be more useful, and so I propose to devote most of the time at my disposal to mentioning certain facts which are likely to be new to some of my hearers with reference to the recent progress of archæology in India. I am the rather led to take this course because the only reason which could possibly induce those who organized this meeting to ask me to preside over our deliberations to-day is that, although I have never had an opportunity of giving much attention to Eastern Art and Archæology, I have been far longer connected with the Government of India than most English politicians. In Mr. Markham's interesting volume entitled *Indian Surveys* will be found a very clear and sufficient account of the beginnings of Indian archæology and of its history down to the year 1860, when, more primary necessities having been supplied, its

promotion was first recognized as a regular part of the duty of Government. 1861–62 was the first year of General Cunningham's activity as a Government archæological surveyor, and from that period down to 1866, when the survey was stopped for a time, he did a great deal of useful work. In the year 1870 the survey was re-established under improved conditions by the Duke of Argyll, then Secretary of State for India, and General Cunningham was again appointed to take charge of it. He proceeded to India, organized his staff, and set about his work without delay. General Cunningham himself visited during the cold season of 1871–72 a great variety of places in the Gangetic Valley from Mathura to Lakhisarai, and he described the results of his investigations in a long report amply illustrated. He also explored the great Mahomedan cities of Gaur, Sunárgaon, and Delhi; but the account of these explorations has, so far as I am aware, not yet appeared. By no means the least generally instructive part of his report is the division into groups which he proposes to make of the archæological remains of India, which is as follows:

Hindu Styles.

1. Archaic, from B.C. 1000 to 250.
2. Indo-Grecian, from B.C. 250 to 57.
3. Indo-Scythian, from B.C. 57 to A.D. 319.
4. Indo-Sassanian, from A.D. 319 to 700.
5. Mediæval Brahmanic, from A.D. 700 to 1200.
6. Modern Brahmanic, from A.D. 1200 to 1750.

Mahomedan Styles.

1. Ghori Pathan, with overlapping arches, from A.D. 1191 to 1289.
2. Kilji Pathan, with horseshoe arches, from A.D. 1289 to 1321.
3. Tughlak Pathan, with sloping walls, from A.D. 1321 to 1450.
4. Afghan, with perpendicular walls, from A.D. 1450 to 1555.
5. Bengali Pathan, from A.D. 1200 to 1500.
6. Jaunpuri Pathan, from A.D. 1400 to 1500.
7. Early Mughal, from A.D. 1556 to 1628.
8. Late Mughal, from A.D. 1628 to 1750.

In the hot season of 1871 General Cunningham's assistants, Mr.

Beglar and Mr. Carlleyle, explored, under his control, Delhi and Agra respectively, and reported very fully upon these cities, dwelling, of course, chiefly upon what was not supplied in previous accounts. In his report on Delhi, which was published this year at Calcutta, Mr. Beglar argues in favour of the opinion that the famous Kutb Minar is of Hindu origin, an opinion from which General Cunningham emphatically dissents, in a preface to his assistant's report. Mr. Beglar also believes that the Hindus had a much larger share in the architecture of the Kutb Masjid as it now stands than his superior officer will allow. General Cunningham observes:

"In the following report Mr. Beglar admits that the pillars have been more or less re-arranged, but he contends that they occupy their original positions in the colonnade of a single Hindu temple, and that their present height is exactly that of the original Hindu colonnade. Consistently with this view, he is obliged to condemn the record of the Mahomedan builder of the Masjid regarding the destruction of twenty-seven Hindu temples as a false boast. This opinion I consider as quite indefensible. The Mahomedan conqueror could have no possible object in publishing a false statement of the number of temples destroyed, nor in recording a lie over the entrance gateway of his great Masjid. I therefore accept the statement as rigidly true. It is, besides, amply confirmed by the made-up pillars of the colonnade on three sides of the court, which, as I have shown in my account of Delhi, must certainly have belonged to a great number of different temples."

I should be curious to know whether any one present who is acquainted with Delhi would subscribe to the following verdict of Mr. Beglar's, who is throughout less complimentary, as it appears to me, than his predecessors have been, to the earlier Mahomedan architects. With regard to this question, as well as to General Cunningham's division of the styles, it would be extremely interesting to hear the views of Mr. Fergusson, whose long and distinguished labours in connexion with Indian architecture are known to every one, and for a fitting presentment of whose remarkable work on *Tree and Serpent Worship* the India Office deserves, I think, some credit. After describing and criticizing the Alai Darwâza, Mr. Beglar says:

"How great is the difference between the Hindu Kutb and this gateway. There not a line of ornament is introduced that does not

point and emphasize some constructive feature; every feature there has an office to perform, and performs it well; it is emphatically a structure possessing harmony. The Alai Darwâza, on the contrary, has little of architectural ornament, and owes its beauty more to the carvings executed by Hindu workmen, the last expiring effort of Hindu art in Delhi, than to any remarkable harmony of arrangement. Indeed, on *à priori* grounds, we should expect this want of appreciation of truthful ornamentation among the Mahomedans, a barbarous and warlike people, whose religion narrowed their minds, naturally none of the most liberal, and demanded the suppression of æsthetic feelings. They could not be expected to reach a high standard in architecture within a short time; still less, then, could they be expected shortly after their conquest of India to produce structures worthy of admiration for harmony; and this is precisely what has happened, for, with all the aid of elaborate ornamentation, carved, be it remembered, by Hindu hands, they have not produced any structure which commands admiration independent of mere beauty of ornamentation (for which the Hindu workman deserves credit), or of sheer greatness of size, and as soon as they attempted to build without the aid of Hindu workmen, they produced what certainly is grand from sheer massiveness, but what is utterly devoid of that combination of qualities which produces in our minds the idea of beauty, independent of colour, carving, material, or mass. It is only after the Mughal conquest that Mahomedan architecture begins to be beautiful."

I have not myself seen these buildings, though I trust to have done so before many months have gone by, and should like to hear what some of those present have to say about these criticisms. In the cold season of 1871–72 Mr. Beglar examined a number of places between the Jumna and the Nerbudda, to the south-east of Agra; but his report, if published, I have not yet seen, nor have I seen the result of Mr. Carlleyle's explorations in Rajpootana during the same period. In the cold season of 1873–74 the greater part of the Central Provinces was explored by General Cunningham and Mr. Beglar, the former of whom made, at a place called Bharahut, nine miles to the south-east of the Sutna Railway station, and 120 miles to the south-west of Allahabad, some very remarkable discoveries. When Prof. Max Müller, in the course of the noble address which he yesterday

delivered to us (and which again and again forced me to think of a remark which the great Alexander von Humboldt made to me at Berlin rather more than twenty years ago—that, namely, it was an honour to England that she afforded a career to such men), approached the subject of these discoveries, I confess I was somewhat horrified. Why, I said, here is the unhappy President of the Archæological Section going to be robbed of the most interesting fact which he had to state. Happily, however, my great Aryan colleague only alighted upon the fact for one moment—fertilizing it, no doubt, when he did so, like one of those insects to which Sir John Lubbock gave the other day, at Belfast, a new interest, as the hon. member for Maidstone is apt to do to everything he touches. And so, I dare say, it will not be amiss if I give some part of General Cunningham's own account of what he has found. In a memorandum published in the "Proceedings of the Asiatic Society of Bengal" for last May, General Cunningham observes:

"In our maps the place is called Bharaod, and I believe it may be identified with the Baodaotis of Ptolemy. It is the site of an old city, which only sixty years ago was covered with dense jungle. In the midst of this jungle stood a large brick stupa, 68 feet in diameter, surrounded by a stone railing 88 feet in diameter, and 9 feet in height. The whole of the stupa has been carried away to build the houses of the present village, although it has been prostrated by the weight of the rubbish thrown against it when the stupa was excavated. When I first saw the place, only three of the railing pillars near the eastern gate were visible above the ground, but a shallow excavation soon brought to light some pillars of the south gate, from which I obtained the measurement of one quadrant of the circle. I was thus able to determine the diameter of the inclosure, the whole of which was afterwards excavated, partly by myself and partly by my assistant Mr. Beglar. In many places the accumulation of rubbish rose to eight feet in height, and as the stone pillars were lying flat, underneath this heap, the amount of excavation was necessarily rather great; but the whole work did not occupy more than six weeks, and all that now exists of this fine railing is now exposed to view."

And again:

"Among the scenes represented there are upwards of a dozen of

the Buddhist legends called Jatakas, all of which relate to the former births of Buddha. Luckily these also have their appropriate inscriptions or descriptive labels, without which I am afraid that their identification would hardly have been possible. I look," continues General Cunningham, "upon the discovery of these curious sculptures as one of the most valuable acquisitions that has yet been made to our knowledge of ancient India. From them we can learn what was the dress of all classes of the people of India during the reign of Asoka, or about three-quarters of a century after the death of Alexander the Great. We can see the Queen of India dressed out in all her finery, with a flowered shawl or muslin sheet over her head, with massive earrings and elaborate necklaces, and a petticoat reaching to the mid-leg, which is secured round the waist by a zone of seven strings, as well as by a broad and highly ornamental belt. Here we can see the soldier, with short, curly hair, clad in a long jacket or tunic, which is tied at the waist, and a dhoti reaching below the knees, with long boots, ornamented with a tassel in front, just like Hessians, and armed with a straight broad sword, of which the scabbard is three inches wide. Here we may see the standard-bearer on horseback, with a human-headed bird surmounting the pole. Here, too, we can see the King mounted on an elephant, escorting a casket of relics. The curious horse-trappings and elephant-housings of the time are given with full and elaborate detail. Everywhere we may see the peculiar Buddhist symbol which crowns the great stupa at Sanchi used as a favourite ornament. It forms the drop of an earring, the clasp of a necklace, the support of a lamp, the crest of the Royal Standard, the decoration of the lady's broad belt, and of the soldier's scabbard."

In a recent paper in the *Academy*, Prof. Max Müller gave a warning on this subject, which he did not repeat yesterday, but which seems important. He said:

"Much depends on the date of these ruins, and here it is impossible to be too cautious. General Cunningham assigns them to the age of Asoka, 250 B.C., chiefly, it would seem, on account of the characters of the inscriptions, which are said to be the same as those found on the Sanchi stupa. But to fix the date of a building in India by the character of the inscriptions is a matter of extreme difficulty. The letters used for the earliest Buddhist inscriptions soon acquired a kind

of sacred character, and were retained in later times, just as in Europe the old style of writing is preserved on architectural monuments of a later age. With all respect for the learning of those archæologists who unhesitatingly fix the date of any building in India by its architectural style, or by its sculptures and inscriptions, we sometimes wish that they might imbibe a little of that wholesome scepticism which Sanskrit scholars have acquired by sad experience. If, however, the date of the Bharahut ruins should prove beyond the reach of reasonable doubt, we should have in the sculptures and inscriptions there found a representation of what Buddhism really was in the third century B.C."

So much for the work of General Cunningham and his assistants; but their work did not stand alone. In October, 1871, the Duke of Argyll called the attention of the Bombay Government to the importance of the production of a complete survey of the rock temples of Western India, and after some correspondence Mr. Burgess, the editor of the *Indian Antiquary*, was appointed to conduct an archæological survey in that Presidency. He entered on his duties in January of this year, and in three months had returned to Bombay, bringing fifty-four photographs, between twenty-five and thirty inscriptions, about forty ground plans, sections, drawings of columns, etc., and forty sketches of sculptures. I understand that Mr. Burgess is at present engaged in drawing up a report upon these. If the results turn out satisfactory, as there is every reason to expect, I hope the Government of India may see its way to allotting more money than it has yet done to the investigation of the archæology of Western India by so active and competent an observer. Perhaps Mr. Burgess, who is in the room, will be prevailed on to address us to-day. These, gentlemen, are the most recent doings of our official archæologists in India, and I am convinced that with every decade we shall have a better and better report to give of the care which is being bestowed by the present rulers of India on the works of their predecessors. We are fond of denouncing ourselves for want of proper attention to these matters. There are few things that Englishmen like so little as being denounced by other people, but there is nothing they like so much as denouncing themselves. Cool-headed observers, however, looking at the enormous amount of absolutely necessary work that had to be done before the first beginnings of a civilized polity were

laid in India, which was rapidly going to utter ruin when we first grew strong there, will be inclined to condone our insufficient attention to the preservation and illustration of ancient monuments in the past, if we only now attend to them sufficiently; and having had the opportunity of seeing a good deal behind the scenes in matters Indian, I think I may say very positively that those who administer the Government of India consider themselves more and more in all things relating to science, art, and literature in India, as trustees, not only for their own countrymen and for India, but for the whole civilized world. That is a view which I strongly hold myself, and which, should circumstances again place me in an influential position in connexion with the Government of India, I shall always do what I can to carry into effect. I had hoped at one time that a building which should have contained the India Museum, the great India Library, and rooms for the Asiatic Society, might have risen at Westminster, as a fitting monument of the presence in the India Office of the Duke of Argyll, the one man of high scientific attainment whom the conflicting tides of English politics ever carried into the great place of Secretary of State for India. The fall, however, of the Gladstone Government swept the Duke of Argyll away from the India Office, just as the great deficit of about six millions which he found upon attaining to power—a deficit for which I ought in justice to mention, hard times, and not his predecessors, were responsible—had under his auspices been filled. I trust that the realization of my hopes will be only deferred, and am well content that if the thing is done, the honour of doing it should belong to our successors in power.

I hope some of our visitors from the other side of the water have taken, or will take, an opportunity of visiting the India Museum. They will find it under the care of Dr. Forbes Watson and Dr. Birdwood, although in an inconvenient locality, extremely full of interest. Among other things their attention should be directed to the system by which Dr. Forbes Watson has tried to diffuse among our manufacturers a knowledge of the beautiful textile fabrics of India, so incomparably superior from an æsthetic point of view to anything which the looms of Western Europe have yet produced. Before concluding, I wish to mention to our foreign visitors the paper which is published by the India Office every year, giving

an account of the "Moral and Material Progress of India." It is very little known upon the continent of Europe, and its wider diffusion would, I think, correct many errors about our doings and not doings in the East which are rather widely prevalent. It can be obtained through any respectable bookseller in London, and is extremely cheap.

Thanking you for the kindness with which you have listened to this address, I now declare the Section of Eastern Art and Archæology to be open.

THE

NÂSIK CAVE INSCRIPTIONS.

BY

PROFESSOR RÂMKRISHNA GOPÂL BHANDARKAR, M.A.

IN the following translations of the Nâsik Cave Inscriptions I have mainly followed Mr. West's excellent lithographs, given in vol. vii. of the Bombay Branch Royal Asiatic Society's Journal. Lieutenant Brett's copies, from which Dr. Stevenson translated them, were also consulted. But finding that neither collection was satisfactory in every respect, I visited the Caves myself about three weeks ago, and compared the copies with the originals. I found a difference in several cases. These have been indicated in their proper places. I was accompanied by my friend Mr. Âbâji Vishnu Kâthavaṭe, himself a Sanskrit scholar, who was of much assistance to me. I have translated all the inscriptions with the exception of No. 23, which consists of a few small and incomplete lines. The numbers used are those of Mr. West's copies. The order in which I have arranged my translations is as follows:—

1. Gautamîputra's Inscriptions, Nos. 26, and 25.
2. Ushavadâta's Inscriptions, Nos. 17, 19, 18, 16, and 14.
3. Inscriptions of private individuals containing the names of kings.
4. The rest.

No. 26.

१. सिद्धं रञ्ञो वासिठीपुतस सिरिपुळुमायिस समछरे एकुणविसे १९ गिह्मणपखे वितीये २ दिवसे तेरसे १३ राजरञ्ञो गोतमीपुतस हिमवतमेरु-

२. मंदारपवतसमसारस असिकअसकमुळकसुरठकुकुरापरतअनुपविदभआकरावतिराजस विञ्झावतपारिचातसह्यकण्हगिरिमचसिरिटनमलयमहिंद-

३. सेटगिरिचकेरपवतपतिस सवराजलोकमंडलपतिगहीतसासनस दिवसकरकरविवोधितकमलविमलसदिसवदनस तिसमुदतोयपीतवाहनस पडिपुणचंदमंडलससिरीक-

४. पियदसनस वरवारणविकमचारुविकमस भुजगपतिभोगपीनवाटविपुलदीघसुंदरभुजस अभयोदकदानकिलिननिभयकरस अविपनमातुसुसुसकस सुविभततिवगदेसकालस

५. पोरजननिविसेससमसुखदुखस खतियदपमानमदनस सकयवनपल्हवनिसुदनस धमोपजितकरविनियोगकरस कितापराधेपि सतुजणे अपाणहिंसारुचिस दिजावरकुटुंबविवध-

६. नस खगारातवंसनिरवसेसकरस सातवाहनकुलयसपतिठापनकरस सवमंडलाभिवादितचरणस विनिवतितचातुवणसंकरस अनेकसमरावजितसतुसंघस अपराजितविजयपताकसतुजनदुपधसनीय-

७. पुरवरस कुजपुरिसपरंपरागतविपुलराजसद्दस आगमानं निलयस सपुरिसानं असयस सिरीस अधिठानस उपचारानं पभवस एककुस[ल]स एकधनुधरस एकसूरस एकबह्मणस राम-

८. केसवाजुनभीमसेनतुलपराकमस [द] क्षणयनुसवसमाजकारकस णभागनञ्जसजनमेजयसकरयथातिरामांबरीससमतेजस अपरिमितमखयमचितमभुत पवनगरुडसिधयखरखसविजाधरभूतगंधवचारण-

९. चंदादिवाकरनखतगहविचिण समरसिरसि जितरिपुसंघस णगवरखधा गगनतलमभिविगाढस कुलविपुल[ण]सिरिकरस सिरिसातकनिस मातुय महादेवीय गोतमीय वलसिरीय सचवचनदानखमाहिंसानिरताय तपदमनिय-

१०. मोपवासतपराय राजरिसिवधुसदमंखिलमनुविधीयमानाय कारितं देयधंम cut away सप cut away सिखरसदिसतिरण्हपवतसिखरे विमानवरणिविसेसमहिमकं लेणं एतं च लेणं महादेवी महाराजमाता महाराजपतामही ददाति निकायस भदावनीयानं भिखुसंघस-

११. एतस च लेणस चितणं निमितं महादेवीय अयकाय सेवाकामो पियकामो च ण cut away पथेसरो पितुपतियसधमसेतुस ददाति गामं तिरण्हपवतस अपरदखिण पासि पिसाजिपदर . . . सावजात . . . रब.

Though covered over with a black oily paint, this inscription, with the exception of a few letters at the end, could be easily read. It is intelligible throughout, though not without a few difficulties; and the words can be readily traced to their Sanskrit originals. The letters not occurring in Mr. West's lithograph, and such as are different there from what I found them to be in the original, are underlined here, as in other inscriptions.

Lines 2, 3. Some of the names cannot be identified. सिरिटन is perhaps श्रीस्तन in Sanskrit. May this be Srî Saila on the Kṛishṇâ?—चकोर is very likely the *Chakora* mentioned in some of the Purâṇas. For the rest see Wilson's Vishṇu Purâṇa and Varâha-Mihira, chap. xiv.

L. 6. खगारात or खखारात. The right-hand stroke indicatory of आ is distinct in the original.

L. 8. क्षणयनु° makes no sense. द् must very likely be read before it, though it does not occur; and then the word would correspond to दक्षिणायनु°. सकर must have been intended for सगर. Engravers not seldom make such mistakes. शंकर can have nothing to do here, for Gautamîputra is compared to ancient kings, and not to gods, in the compound. Dr. Stevenson's शकारि will not do; for what is wanted here is an old Purâṇic king.

L. 9. विचिण offers some difficulty. If taken as corresponding to वितीर्ण, there is nothing in the following words which it may with propriety be made to qualify. वितीर्णः समरः would hardly be good sense; for the fight is with mortal enemies, and not with the wind, Garuḍa, etc. Nor would the compound ending with the word look well as an adverb. The letter representing *cha* may not unlikely have been engraved for *dha*, which it greatly resembles; and with a small stroke to the right, *ṇa* would be *ṇâ*, and the whole word would be

विधिणा. This yields pretty good sense; for what seems to be intended is that he propitiated the wind, Garuḍa and the rest by some processes, and then obtained an easy victory over his enemies. **मातुय, महादेवीय**, etc., stand for **मातुए, महादेवीए**, etc., instrumental singulars in Prakrit.

L. 10. **तिरहु** or more properly **तिरहि** (see No. 25, l. 8), corresponds to **त्रिरश्मि** (see No. 17, middle of l. 3, and No. 15, l. 7), and was the name of the hill on which these cave-temples are excavated. It occurs in No, 9, No. 11, l. 2, No. 25, about the end of l. 9, and also in l. 11 of this. Dr. Stevenson makes "Kanha mountain" of it in one place (p. 43), "the rays of the setting sun" in another (p. 50), and "wilderness" in a third (p. 55), Journ. B.B.R.A.S. vol. v. **भदावनीयानं** ought to be **भदायनीयानं** (see ls. 12 and 13 below) = **भद्रायनीयानाम्**, which was the name of a Buddhistic sect (see Wassiljew, p. 230).

L. 11. **चितनं.—लेणपचितन** is the reading of both Lieut. Brett and Mr. West; but I could distinctly see **स** instead of **प** and **लेणस** the genitive, is wanted here. **चितनं = चेत्यानाम्. अयकाय = आर्यकायाः** gen. "of the venerable lady." **पिसाजिपदर** is unintelligible.

SANSKRIT OF No. 26.

१. सिद्धम्। राज्ञो वासिष्ठीपुत्रस्य श्रीपुडुमायेः संवत्सर एकोनविंशे १९ ग्रीष्मपक्षे द्वितीये २ दिवसे त्रयोदशे १३ राजराजस्य गौतमीपुत्रस्य हिम वन्मेरु-

२. मन्दारपर्वतसमसारस्यासिकाश्मकमुढकसुराष्ट्रकुकुरापरान्तानूपविदर्भाकरावन्तीराजस्य विन्ध्यावत्पारियात्रसह्यकृष्णगिरिमचश्रीस्तनमलयमहेन्द्र-

३. श्रेष्ठगिरिचकोरपर्वतपतेः सर्वराजलोकमण्डलप्रतिगृहीतशासनस्य द्विवसकरकरविबोधितकमलविमलसदृशवदनस्य त्रिसमुद्रतोयपीतवाहनस्य परिपूर्णचन्द्रमण्डलसश्रीक-

४. प्रियदर्शनस्य वरवारणविक्रमचारुविक्रमस्य भुजगपतिभोगपीनवृत्त विपुलदीर्घसुन्दरभुजस्याभयोदकदानक्लिन्ननिर्भयकरस्याविषन्नमातृशुश्रूषकस्य सुविभक्तत्रिवर्गदेशकालस्य

५. पौरजननिर्विशेषसमसुखदुःखस्य खचियदर्पमानमर्दनस्य शकयवन-

पल्हवनिषूदनस्य धर्मोपार्जितकरविनियोगकरस्य क्षतापराधेपि शत्रुजने ऽप्राणहिंसारुचेर्द्विजवरकुटुम्बविवर्ध-

६. नस्य चगारातवंशनिरवशेषकरस्य शातवाहनकुलयशःप्रतिष्ठापनक-रस्य सर्वमण्डलाभिवादितचरणस्य विनिवर्तितचातुर्वर्ण्यसंकरस्यानेक सम-रावजितशत्रुसंघस्यापराजितविजयपताकशत्रुजनदुष्प्रधर्षणीय-

७. पुरवरस्य कुलपुरुषपरंपरागतविपुलराजशब्दस्यागमानां निलयस्य सत्पुरुषाणामाश्रयस्य श्रियोऽधिष्ठानस्योपचाराणां प्रभवस्यैककुश[ल]स्यैक-धनुर्धरस्यैकशूरस्यैकब्रह्मण्यस्य राम-

८. केशवार्जुनभीमसेनतुल्यपराक्रमस्य दक्षिणायनोत्सवसमाजकारकस्य नभागनहुषजनमेजयसगरययातिरामाम्बरीषसमतेजसो ऽपरिमितमखय-मचित्रमद्भुत[तं]पवनगरुडसिद्धयक्षराक्षसविद्याधरगन्धर्वचारण-

९. चन्द्रदिवाकरनक्षत्रग्रहविधिना समरशिरसि जितरिपुसंघस्य नग-वृत्तधा गगनतलमभिविगाढस्य कुलविपुलश्रीकरस्य शातकर्णेर्मात्रा महा-देव्या गौतम्या बलश्रिया सत्यवचनदानक्षमाहिंसानिरतया तपोदमनिय-

१०. मोपवासतत्परया राजर्षिवधूशब्दमखिलमनुविधीयमानया का-रितं देयधर्म cut away शिखरसदृशत्रिरश्मिपर्वतशिखरे विमानवरनिर्वि-शेषमहिमकं लयनम्। एतच्चलयनं महादेवी महाराजमाता महाराजपि-तामही ददाति निकायस्य[याय]भद्रायनीयानां भिक्षुसंघस्य[घाय]।

११. एतस्य च लयनस्य चैत्यानां निमित्तं महादेव्या आर्यकायाः सेवा-कामः प्रियकामश्च न cut away पथेश्वरः पितृपतियशोधर्मसेतोर्ददाति ग्रामं त्रिरश्मिपर्वतस्यापरदक्षिणपार्श्वे . . . सर्वजात . . . रव।

TRANSLATION.

This cave-temple, a benefaction, the greatness of which is not excelled by the best(1) of Vimânas (celestial cars), is caused to be constructed on the summit of Triraśmi, which is like the summit of ——, on the 13th thirteenth day, in the 2nd second fortnight of Grîshma(2), in the year 19 nineteen of the King Śrî Puḍumayi, the son of Vâśishṭhî, by the Great Queen Gautamî, the presiding genius of power, taking delight in veracity, charity, forbearance, and abstinence from killing,

devoted to religious austerities, self-restraint, vows and fasts, and acting(3) in every way as befits the title of "daughter(4) of royal sages," and the mother of Sâtakarṇi, Gautamîputra (the son of Gautamî), the King of Kings, whose might [firmness] is equal to that of the mountains Himâlaya, Meru, and Mandâra; who is King of Asika, Aśmaka, Muḍhaka, Surâshtra, Kukura(5), Aparânta, Anûpa, Vidarbha, Akara, and Avantî, and lord of the mountains Vindhyâvat, Pâriyâtra, Sahya, Krishṇa-giri, Malaya, Mahendra, Śreshṭha-giri, and Chakora; whose orders are obeyed by the circle of all kings, whose pure face resembles the lotus blown open by the rays of the sun, whose beasts of burden have drunk(6) the waters of the three seas, whose look is as graceful and lovely as the full disk of the moon, whose gait is as pleasing as that of an excellent elephant, whose arm is as stout, rounded, massive, long and beautiful as the body of the lord of serpents, whose fearless hand is wetted by the water poured in granting(7) asylums, who serves his living (*lit.* not dead) mother, who has well arranged the times and places proper for [the pursuit of] the triad(8), whose happiness and misery are the same as, and not different from, those of his citizens, who has quelled the boast and pride of Kshatriyas, who is the destroyer of the Śakas, Yavanas, and Palhavas, who spends the [revenue got from] taxes levied only according to the law, who does not like to destroy life even in the case of enemies who have given offence, who has increased(9) the families of the best of Brâhmans, who exterminated [*lit.* left no remnant of] the race of Khagârâta, who has established the glory of the family of Śatavâhana, whose feet are adored by the whole circle of kings, who has stemmed [the progress of] the confusion of the four castes, who has conquered the host of his enemies in innumerable battles, whose great capital is unapproachable to his enemies and has its victorious flag unconquered, to whom the great title of king has descended from a series of ancestors [*lit.* men of his family], who is the abode of learning, the support of good men, the home of glory, the source of good manners, the only skilful person, the only archer, the only brave man, the only supporter of Brâhmans, whose exploits rival those of Râma, Keśava, Arjuna, and Bhîmasena; who holds festive meetings on the occasion of the summer solstice, whose prowess is equal to that of Nabhâga, Nahuśha, Janamejaya, Sagara, Yayâti, Râma, and Ambarîsha; who conquered the host of his enemies in the brunt of

battle in a curious and wonderful manner in virtue of his innumerable worships and observances, and by means of rites concerning the wind, Garuḍa, Siddhas, Yakshas, Râkshasas, Vidyâdharas, ghosts, Gandharvas, Charaṇas, the moon, the sun, the constellations and planets; who erects his neck high in the sky like (10) mountains and trees [*lit.* who goes or makes towards the sky], and who has brought prosperity to his race. The great Queen, the mother of the Great King, and the grandmother of the Great King, gives this cave to the congregation, the host of mendicants of the Bhadrâyaṇîya school. The Lord of ——patha, desirous to please and to serve the venerable lady, the great Queen, grants a village on the south-western side of the Triraśmi mount for the sake of the Chaityas (images) in the cave-temple, in order thus to prepare a bridge for the fame and religious desert of her father and husband.

Notes.

The syntactical connexion of the sentence ending with **लयनम्** in the tenth line is **शातकर्णेर्माचा गौतम्या चिरश्मिपर्वतशिखर इदं लयनं कारितम्।** The words from **राजराजस्य** in the first line to—**श्रीकरस्य** in the ninth, are epithets of **शातकर्णि**; and from **महादेव्या** to —**विधीयमानया** of **गौतमी**.

(1). My friend remarked, when we came to this part of the inscription, that below the plinth of the verandah of the cave, were carved figures of men with poles on their shoulders, giving to them the appearance of Vimâna-bearers, like the modern pâlkî-bearers, and to the cave that of a Vimâna.

(2). It appears to have been the custom in some parts of the country in those days to mark the Ṛitu or season instead of the month. Each season is composed of two months, and consequently four *pakshas* or fortnights. Grîshma comprehends Jyeshṭha and Âshaḍha.

(3). **अनुविधीयमानया** is in form *passive*, while the *active* sense is required. It may have been a mistake of the engraver.

(4). Daughter or daughter-in-law.

(5). A portion of modern Rajaputana appears to have been known by the name of Kukura; for it is called *Kiuchelo* by Hwan Thsang, which General Cunningham identifies with Gurjjara (Ancient Geogr. of India, p. 312). But Gurjjara is nowhere mentioned as the name of

a country; and supposing there was a country of that name, its position ought to be farther to the south. The Gurjjara dynasty which the General connects with that country reigned at Broach (see Journ. B.B.R.A.S. vol. x.). Kukura answers to Kiuchelo better than Gurjjara. Aparânta must be the western coast below the Sahyâdri; for Kâlidâsa represents Raghu, in the fourth canto of the Raghuvanśa (śl. 52, 53, and 58), to have crossed the Sahya to conquer that country, and to have by means of his immense army made the sea to appear "as if it touched the Sahya mountain." Anûpa was a country on the Upper Narmadâ, with Mâhishmatî for its capital (see Raghuvanśa, canto vi. 37–43).

(6). According to the usual Sanskrit idiom (Pân. ii. 2–36) **पीत** ought to be placed before **चिसमुद्रतोय**. But there are exceptions, as noticed in Pân. ii. 2–37. Such expressions as **माहवसिरिणो** for **श्रीमाधवस्य** (Mâl. Mâdh. act vi.) are not uncommon. Jagaddhara's remark in this case is **माधवश्रिय इत्यत्र प्राव्हते पूर्वनिपातानियमाच्छ्रीमाधवस्येत्यर्थः।** According to him, therefore, adjectives may be placed after the noun in Prakrit where this cannot be done in Sanskrit.

(7). Properly the phrase ought to be translated thus, "Whose fearless hand is wetted by giving the water of asylum or safety." But there is no object or propriety in comparing safety to water. The expression ought to be **अभयदानोदक**. The compound, however, may be dissolved as **अभयस्योदकेन दानम्**, but this is hardly good.

(8). The triad is **धर्म** "religious merit or desert," **अर्थ** "wealth, possessions, or worldly interests," and **काम** "desires or pleasures."

(9). To put a Brâhman in a condition in which he may "increase and multiply" his race has always been considered an act of virtue. Ushavadâta is praised in Inscription No. 17 for "having given eight wives to Brâhmans," *i.e.* given them the means of marrying.

(10). The termination **धा** showing "manner" or "variety," which in Sanskrit is applied only to numerals, seems to be appended here to common nouns. Hence **नगवृक्षधा** means "in the manner of mountains and trees."

By far the greater part of Dr. Stevenson's translation of this inscription is wrong, and wide away from the true sense. His "Varâja, lord of the circle of Lankâ," "Sûrya going to the region of the lotuses at the suggestion of Chhâyâ," "the spotless sister," "Kshatriya flaming like the god of love, "the four institutes, one for the sick and in-

firm," "Umâkhelâ, the queen," etc., etc., have all disappeared in my translation. I need not criticize it further. Any one who will compare both with the original will perceive the truth of my remark.

It will be seen that the cave was caused to be constructed and assigned to the mendicants by Gautamî, the mother of Sâtkarṇi Gautamîputra, and not by his wife or widow, as supposed by Dr. Stevenson and all subsequent writers.

Below this inscription there is another composed of about three lines in smaller characters, which is difficult to read. The time at my command was so short that I had to come away without comparing Mr. West's transcript with it. But I do not think such a comparison would have been of much use. The engraver was evidently in haste, and wanted to compress much matter within the short space at his disposal, in consequence of which the letters are badly formed. The difficulty is increased by a portion in the middle of each line being destroyed. The context is thus cut off. I have, however, been able, by comparing the two copies, to make out the following:—

No. 26A.

११. नवनरस्वामी वासिठीपुतो सिरीपुटुमवि आणपयति गोवधने अमचं[.]

१२. सवखदलनं[.] अमेणं[.] सव० १९ गि० प० २ दिव० १३ धनकटसामिनहि य एथ पतेतर cut away न एतस तस लेणस पटसथरणे अखयहेतु एथ गोवधनहरे दखिणनगे गामो व तिथण भिखुहिं देवीलेणवासेहिं निकायेन भदायनीयेहिं पतिखाय दतो एतस दानगामस सुदसनेहिं परवटकं[.] एथ गोह[व]धन हरे पुव

१३. गामो [म] समदेसं[.] ददिम एतस महाअइरकानं[.] ददानधमसेतुस लेणस पटिपथरणे अखयहेतो [तु] गामं[.] मम [वि] लपदं[.] तन cut away सण cut away येन भदायनीयेहिं पतिखय उयपय [वियापितो] एतस च गामस सम [वि] लपदस भिखुपालपरिबारइथे समादतं[.] पालनं[.] पवजितपरि-

वरि देवानं कणएं कंजे गोनबनवाथवनढसरय वेण्हपालिन अमचेणा-
णंतेन मतगणसपणपणसिस जिनवरस बुधस

१४. वितराम अपवेसं अनामसं अदाणखणकं अरठ समनमकं [सवि-
नयिकं] सवजातपरिवारिकं च एतहिन परिहारेहिं परिहारेहिं एतं च
गामं सम[वि]लपदपरिवारं च एथ णखध[णिबध] लिपि अद[दि]मान-
तमसवसुदसनानं विनिबंधकरेहिं आणतमहा सेनापति ना मेधाविनाखद
सतर[ने]ण निछिता व निकदेवस कंजे

When a reading not noticed below is not found in one of the copies, it should be looked for in the other.

L. 12. अमेणं looks like अमेप, but what is required is a Prakṛit word having the sense of अस्माकम्.—सामिनहिं is the instrumental plural occurring again in No. 25, l. 5. The न of the singular seems to have the plural termination attached to it in this case, as in the Marathi plural राज्या नीं (= नहीं), the singular being राज्यानें. The verb or participle of which सामिनहिं is the agent in the instrumental case is wanting, probably lost in the portion of the inscription destroyed. It should be some word signifying "given"—एतस. The *t* seems to have been badly cut in the rock or confounded by the copyists with *v*. —पटसंथरणे = प्रतिसंस्तरणे whence the ट ought to be टि. The word occurs in the next line in the form of पटिपथरणे = प्रतिप्रस्तरणे.—गोवधनहरे may also be read as गोवधनाबारे = "district of Govardhana."—तिथण is somewhat difficult. Mr. West has भिलेण. I prefer the former, and refer it to the Sanskrit तत्स्थान or चिस्थान.—भदायनेहिं. The भ looks like न, but there can be little doubt that भ is the correct reading, since the word occurs near the end of l. 10 and in the middle of l. 13. In the latter place it is distinct in Lieut. Brett's copy,—पतिखन. The first letter is च in Lieut. Brett's, and unreadable in Mr. West's. It must be प, for the word is repeated in the next line, where the प is distinct. In the latter place the letter that looks like व must be corrected to ख, as we have got it here.—सुदसनेहिं. The vowel of the last letter is not distinct. The vowel occurs in the last line about the end.—पुव. The vowel of the first letter is wanting in Mr. West's, but some mark denoting it is to be seen in Lieut. Brett's, though on the left side of the letter. Mr. West suspects the existence

of म after व, but that letter is not required here unless we read the whole word as पथम.

L. 13. गामो. This is nominative singular, but the sense requires the accusative—ददिम appears to be the first person plural of the perfect. In Sanskrit, however, the root दद् first class takes the Âtmanepada terminations. Or if one द् is considered redundant, and consequently to have crept in by mistake, the form is of the root दा. But the Prakrits generally have not preserved the Âtmanepada. —अद्रकानं = आर्यकानाम्. The dots representing द् sometimes stand for ज as in l. 5 of No. 12, in which case the word is अजरकानं. The plural is used as expressive of respect.—समलपदं might be taken as corresponding to समलपथम् or समलपद्मम्. पथ or पद्म means a "road" or "path," but मल does not yield an appropriate sense. The letter, however, which looks like म may also be read as वि, in which case the expression is सविलपथम् "together with the ditches (such as wells) and roads." The expression occurs further on in this line and in the next.—उयपय. The isosceles triangle which represents व has in several cases in this inscription lost one of its sides. Taking the first letter, therefore, as व, the word nearest to उयपय which makes sense is वियापिओ or वियापितो "abandoned."—देवानकणणकज is somewhat unintelligible. The first word is very likely देवानं = देवानाम्, the second must be one having the sense of "a mendicant" or "beggar," and the third कजे = कार्ये; so that the whole expression appears to mean "for the sake of gods and beggars and mendicants." Generally these are the objects of charity. (*See* वनीकदेवस्य below.) The first letter is not distinct, as it looks like ख.—गोनबन must be a mistake for गोवधन.—नढसरय or if the न is taken with the preceding to give it the form of the instrumental singular, ढसरय is hardly intelligible. But सरय may be read as सिरिय or सिरिणा = श्रिया and नढ may be traced to नद्ध, in which case the expression is नद्धश्रिया "attended [*lit.* begirt] with prosperity."—वेण्हपाल is perhaps the same man as विल्हुपालित, mentioned in No. 25, l. 2.—सपण is difficult. It may be the representative of स्वप्न.

L. 14. अपवेसं, etc. These expressions are commented on in the notes on l. 4, No. 25.—णिखध should be णिबध (*see* ls. 5 and 11, No. 25.—अदिमानतम = अतिमान्यतम looks well as an epithet of चिनिबंधकरेहिं, but is made part of the compound ending with सुदसनानं, which in Sanskrit will not do.

SANSKRIT OF No. 26A.

११. नवनरस्वामी वासिष्ठीपुत्रो श्रीपुडुमविराज्ञापयति गोवधनेऽमात्यं

१२. सर्वाक्षदलनमस्माकं सं० १९ ग्रो० प० २ दि्व० १३। धनकटस्वामि-भिर्योऽत्र . . . cut away . . एतस्य तस्य लयनस्य प्रतिसंस्करणेऽक्षयहेतुरक्ष गोवर्धनावारे दक्षिणमार्गे ग्रामः स तत्स्थानभिक्षुभिर्देवीलयनवासैर्निकायेन भद्रायनीयैः प्रतिख्याय दत्तः। एतस्य दानग्रामस्य सुदर्शनैः परिवर्तकमक्ष गोवर्धनावारे पूर्व-

१३. ग्रामसमदेशं ददिमैतस्य महार्यकानां ददानधर्मसेतोर्लयनस्य प्रति-प्रस्करणेऽक्षयहेतुग्रामं सविलपद्यम्। . . cut away . . cut away [निका] येन भद्रायनीयैः प्रतिख्याय वियापित एतस्य च ग्रामस्य सविलपद्यस्य भिक्षुपा-लपरिवारहस्ते समादत्तं पालनं प्रव्रजितपरिवारे देवानां . . . कार्ये। गो-नबनवास्तव्यनद्यश्रिया वि ष्णुपालेनामात्येनाज्ञप्तेन मर्त्यगणस्वप्नप्रणाशिनः [नि] जिनव रस्य [राय] वृद्धस्य [द्धाय]

१४. वितरामोऽप्रवेश्यमनामृश्यमदानखानकमराट्सविन यिकं सवेजा-तपरिवारिकं च। एतः परिहारैः परिहारैरेतं च ग्रामं सविलपद्यपरिवारं च। अत्र निबद्धलिपिरतिमान्यतमैः सर्वसुदर्शनानां विनिबन्धकरैराज्ञप्तम-हासेनापतिना मेघाविनाक्षतसत्विन निक्षिप्ता वनीकदेवस्य कार्ये।

TRANSLATION.

The prosperous Puḍumayi, the lord of Navanara(1), commands Tarvâkshadalana, the Royal Officer in Govardhana:—The village in the Govardhana district, in the southern division, which [was granted] on the thirteenth day of the second fortnight of Grîshma, in the year nineteen of our (reign), by the Lord of Dhanakaṭa, as a permanent provision for the keeping up of this said cave-temple, was disapproved by the mendicants of the place, the Bhadrâyanîyas in congregation, residing in the Queen's cave-temple, and given [back]. In its place we granted, by [issuing] mandates, another village of the same area as the former, along with the wells and roads, as a permanent provision for the keeping up of the cave-temple of the great venerable lady

(or grandmother) which is the bridge of religious desert to the donor; and the management of the village, which was disapproved by the Bhadrâyanîyas in congregation, was placed in the hands of the body of the protectors of the mendicants, [and of?] the body of the recluses(2), for purposes concerning gods and beggars [generally]. We [now] grant the village to Buddha, the best of Jinas, the destroyer of the ignorance (*lit.* sleep) of the crowd of mortals, by [issuing] commands to the prosperous Vishṇupâla, the Royal Officer residing in Gonabana. It is not to be entered on or interfered with by others, not to include what has been granted [before] or may be dug out, and not to be subject to the rules (in matters of revenue) applicable to [other parts of] the country, and to include all that may grow on it. [We grant] with these restrictions this village, along with the wells, roads, and appurtenances. This charter (composition) is engraved here by the General, the talented Akshatasattva, at the command(3) of the very respectful composers of all mandates (or charters).

Notes.

(1). I translate **नवनरस्वामी** as "the Lord of Navanara," upon the analogy of the expression **धनकटस्वामी**. Navanara must have been the name of Paḍumayi's capital. But it may be translated as "the new lord of men." **नरस्वामी**, however, in the sense of a King, is hardly to be met with, and the epithet **नव** or "new," as applied to the King, can have so significance, since about the time that it was used in this inscription he must have been more than nineteen years on the throne.

(2). A distinction seems to be intended here between a **भिचु** and a **प्रव्रजित**. The former term signifies a regular Buddhistic mendicant, and the latter any one who has abandoned the world and devoted himself to the life of a recluse.

(3). Command, *i.e.* the respected person composed the charter, and was engraved as composed. The word **आणत** may here be translated "at the dictation of."

The Lord of Dhanakaṭa spoken of in this inscription was Gautamîputra; for the title occurs before his name in No. 25, l. 1. He appears to be represented here to have granted a village on the thirteenth day of the second fortnight, etc., which is the date of No. 26.

This, therefore, must be the same grant as that mentioned in l. 11 of that inscription. From No. 26A we see that the Bhadrâyanîyas disapproved the village granted to them by Gautamîputra, whereupon Puḍumayi gave them another in its place, and the old one, which for some time had been devoted to charitable purposes generally, was assigned to the Buddhists by this charter.

Govardhan appears from this inscription, and from No. 25, to have been the capital of the province during the reign of these princes. There is a village of that name at present about three or four miles from the hill where these caves are constructed.

No. 25.

१. सिधं सेनानी विजयति यो विजयतिथवारा[रे] गोवधनस ब[ध]नं-
कटक स्वामि गोतमीपुतो सिरिसदकणि

२. आनपयति गोवधने अमचविण्हुपालितं गामे अपरकखदियं यं[.]
खेतं अजकालकीयं उसभदाते[से?]न भुतं निवत[न]-

३. सतानि बे २०० एतं अह्म खेतं[नि] वतनसतानि बे २०० इमेसे पवजि
तानं तेकिरसिनं [पुरिसानं] वितराम एतस च [त] स खेतस परिवारं

४. वितराम अपावेसं अनामसं अदाणखान[or द]कं अरठसविनयिकं
भवजातपरिबारिकं च एतहिन परिहारेहिं परिहारेहिं.

५. एतं च स [तं] खेतं परिवारं च एथ निबध लिहि[पि] सुविणेन आ-
णत अमचेन सिवगुतेन [नि] छतो [ता] महासामिच [न] हिं अपरखेतं.

६. दता [तं] पविकसवछरे १९ वसापखे ४? दिवसे तापसानं कज ॥ सिद्धं
गोवधने अमचस समकस देया राजनिता

७. रणो गोतमीपुतस सातकणिस महदेविय च जि वासुठीय राजमा-
तुय वचनेन गोवधने [अम] च समको आणति वतवो तवचव[गोवधने] चि-

८. ठतहि एथ असमहि पवततिरह्मिह्मि अह्मधमदाने लेणे पतिवसतानं
पवजितानं भिखूनं गामे रखदिसु पुवं खेतं दतं तं च खेतं

९. एक सतं स च गामो नवसति एव[क] सति यं[.] दानि [नं] एथ नगर-
मीमे राजकखेतं अह्मपेतकं ततो एतस पवजितानं भिखूनं तेरण्हकणदरहि

१०. खेतस निवतनसतं १०० एतस च खेतस परिवारं वितराम अपावेसं अनामसं अदाणखाणकं अरठसविनयिकं सवजातपरिवारिकं च.

११. एतहिन परिहारेहिं परिहारेहिं एतं च तं खेतं परिहारं च एथ निबधा लिपि सुविणेन आणतपडिहरखिय [यो] लाजयमातो लेखि संवछरे २४.

१२. वसानं[.] पखे ४ दिवसे पंचमे ५ पुजितिनं कज निबंधो निबधो सवछरे २४ गिह्मणपखे ४ ? दिवसे १०.

This inscription is faintly cut, and the surface of the rock is so uneven that the natural indentations appear like letters or parts of letters. Hence neither of the published copies is satisfactory. Though Mr. West's is superior as a whole to Lieut. Brett's, the latter is in several places better than the former. With the assistance of these two I was able to make out a good deal, but there are several difficulties which cannot be satisfactorily cleared up.

Line 1. सेनानी. What is marked as ⊥ = ये in Mr. West's copy has the mark of the vowel इ above it, and looks so much like the letter which he has taken to be I = ण, that I have put down both as नानी.—विजयति. The sense requires that Mr. West's वो should be taken as वि.—तिथ. ⊢o looks distinctly like ⊥o = तिथ. तिथवारा should be तिथवारे which represents the Sanskrit तीर्थद्वारे. Hemachandra gives वारं, दारं and दुवारं as the Prakrit forms of द्वारं (क्वचित्पर्यायेण—द्वारं। वारं। दारं।). The vowel marks are not distinct here. It is वारा in Mr. West's, but वार in Lieut. Brett's. It must very likely be वारे.—वनंकटका. The first letter should be read ध (see No. 26A, l. 12). The dot on न and the right hand stroke of क must be mistakes. There appears to be a letter like ⋎ = म after this word, but nothing satisfactory can be made out of it.—स्वामि. ⋎⋎ when looked at from a certain position looks like ⋎⋎ = स्वामि; and it must be so, for if it were simply मा, the nether loop would not be so much below the level of that of the next म. The loop, therefore, must be another letter, *i.e.* व.—गोतमीपुत्तो. ⋎ must have the mark of इ, though I did not see it distinctly.—सदकणि. I is distinctly ⊥.

Line 2. आनपयति. The first two letters are ⊢⊥ = आन; ⋏ must be ⋏.—अपरकखदियं. The sense of this cannot be determined

with perfect certainty, but it must refer to the direction in which the field lay. In No. 26, l. 11, the word अपरदखिण meaning "south-west" occurs, and उतरापरा in No. 19. The expression may therefore have been intended for अपरदखिणीय.—अजकालकीयं probably corresponds to अद्यकालकीयम् (अद्यकालिकम्).—निवतन. ⅄ and ⊥ have been put together by Mr. West, but they appear separate in Lieut. Brett's copy.

Line 3. The mark for a hundred has a side stroke, though the copies do not give it. It therefore signifies "two hundred."—निवतन. The first letter is omitted in Mr. West's copy, but there is a perpendicular stroke to represent it in Lieut. Brett's. The context requires the नि.—तेकिरसिनं must very likely be पुरिसानं = पुरुषाणाम्.—What looks like चस must be तस, for the phrase एतस तस occurs in No. 26A.

Line 4. अपावेसं अनामसं अदाणखादकं अरठसविनयिकं. Mr. West's copy is not faithful to the original here. The third word is not distinct even in the original; but it must be as I have put it, for these expressions occur in l. 10 below, and in the last line of No. 26A. In this inscription, however, we have अरठसमनमकं or अरठसवीनवीकं for the fourth expression. These phrases correspond to आचाटभटप्रवेश्यम् or समस्तराजकीयानामप्रवेश्यम्, पूर्वप्रत्तदेवब्रह्मदायर्जम् or सर्वदानसंग्राह्यम्, etc., occurring in copperplates of a later date (see Journ. R.A.S. vol. i. N.S., B.B.R.A.S. vols. i. and x., and B.A.S. vol. vi.). अपावेसं is to be traced, I think, to अप्रावेश्यम्, अनामसं to अनामृश्यम्, अदाणखादकं or आदाणखानकं, as it may be read, to आदानखातकं or आदानखानकम्, and the last probably to अराष्ट्रसविनयिकम्, or more in conformity with Sanskrit usage, to अराष्ट्रसविनयम्, *i.e.* "not to be controlled or dealt with in point of revenue in the same manner as other parts of the country," *i.e.* "not to be subjected to taxes."—एतहिन. The न appears to form part of the termination, the nasal portion of the हिं of the instrumental plural being written separately.

Line 5. एत च सखेत—the reading of Lieut. Brett's copy. It should be एतं च तं खेतं.—I found परिवारं instead of परिहारं.—एथ निबध is the reading of the original, and of Lieut. Brett's copy. लिहि ought to be लिपि, the word occurring in the same circumstances in l. 14, No. 26A.—सुविणेण = सुविज्ञेन "a learned man." Compare सर्वसुदर्शनानां विनिवन्धकरैः in l. 14, No. 26A. These charters were written by learned men for those officers.—आणत ought either to be आणतेन =

आज्ञप्तेन or should be taken as forming a compound with the following word.—अमचेन. Mr. West's copy is inaccurate here; the other is better. छत्तो represents the Sanskrit चित्तो, or if there is a नि in the blank, निचित्तो "placed," *i.e.* "engraved."—महासामिचहि must be महासामिनहिं. (See l. 12, No. 26A, and the note).—अपर. The perpendicular stroke to the right hand is wanting in the case of अ.

Line 6. पविक or पवाक is very likely पुवक = पूर्वक "the preceding" or "former."—तापसानं. The mark of आ in ता is distinct in the original and in Mr. Brett's copy. राजनिता may have been intended for राजाणति = राजाज्ञप्ति.

Line 7. चजि. I do not know what to make of this. If च were to be taken as the copulative particle, जि alone would not signify anything, and the context seems to require that the sense should be "the Queen of Sâtakarṇi Gâutamîputra," and not "Sâtkarṇi Gâutamîputra, and the Queen," because in line 9 we have the word पेतकं "got from the father," *i.e.* patrimony, which expression would not suit in the case of the King. Perhaps it may be भजा = भार्या or वजा = वर्या. It may notwithstanding be चअजा = चार्या; the अ may have existed, though it is not now seen, or it may be चस or वस, equivalent to वासू, a term of honour used before the names of women, as it is in Inscription No. 24.—वासुठीए. I distinctly saw the word, though in the copies it is found in a mutilated form. The सु for सि may be a mistake of the engraver or owing to a defect in the rock.—अमच. There must have been अम in the blank before च; for the following name is the same as in l. 6, and it is preceded by अमच there.—आणति. I saw this word distinctly.—गोवधने. What seems like नवचवि may be गोवधने, and the first three letters countenance this supposition. It is difficult to say what the next four letters stand for. Perhaps the word is वथवह्मि = वास्तव्ये or चिठंतह्मि = तिष्ठति meaning "situated."

Line 8. असमहि. The हि is not unlikely ह्मि, and I saw something like ⅄ below it. The expression, then, is असमह्मि = आश्रमे.—पवततिरह्मिह्मि. The copies are defective here, but I could discern these words in the original.—अह्मधम. Lieut. Brett's copy is accurate here and in the case of the next word, where, however, the त ought to have the mark of र, as it has in the original.—गामे रखदिसु. Here, again, I found Lieut. Brett's copy to be correct.

Line 9. नवसति. The older copy is better here also. एवसति य दानं. The first two letters are very illegible in the original; the second

looks like Δ; but it appears likely that the two stand for एक; for it is in this way that the sentence yields any sense. Had the word गामे in the last line been गामो, and had there been च after खेत, I should have taken these two letters to represent नव, and their appearance would support this reading; for the sense in that case would be:—"Formerly a village and a field were granted to the mendicants. The field is one hundred (nivartanas), and the village nine. At the place where there is the grant of nine hundred is crown-land on the boundary of the town, etc."—दानि must be दानं.—नगर-सीमे is a locative, for Sanskrit nouns ending in न् become masculine nouns ending in अ (Var. Pr. Pr. iv. 18).—पेतकं. So I read it. In Mr. West's copy it looks somewhat like सतक, but in Lieut. Brett's decidedly more like पेतक, and this gives good sense.

Line 10. The words in this line have been remarked on before.

Line 11. लिपि सुविणेन. See notes on l. 5 above. What looks like लठ must be लिपि.—परिहारेहिं परिहारेहिं. We see from l. 4 that these should be the words here; but the original is so bad that Mr. West has got some characters which look like the usual marks for the figure 10. Lieut. Brett's copy is better. पडिहरखिय. Perhaps the name of the engraver = प्रतिभारक्षित like धर्मरक्षित occurring in Inscription No. 11. —लाजयमा तो = राजयमात्यो, the य being probably a mistake for अ.

Line 12. पुजितिनं is not unlikely पूजितानाम्.

A good many of the anusvâras in the foregoing transcript do not occur in the two copies of the inscription referred to. Some of these I found in the original myself, and others have been put in only when the context undoubtedly required them.

Sanskrit of No. 25.

१. सिद्धम् । सेनानीर्विजयति यो विजयतीर्थद्वारे गोवर्धनस्य । धनक-टकस्वामी गौतमीपुत्रो श्रीशातकर्णि-

२. राज्ञापयति गोवर्धनेऽमात्यं विष्णुपालितम् । यामेऽपरदक्षिणीयं यत्क्षेत्रमद्यकालिकमुसभदासेन[वृषभदासेन] भुक्तं निवर्तन-

३. शतानि द्वे २०० एतद्वयं क्षेत्रं निवर्तनशतानि द्वे २०० अस्य प्रव्रजितानां [तेभ्यः] पुरुषाणां [षेभ्यः] वितरामः एतस्य तस्यक्षेत्रस्य परिवारं

४. वितरामोऽग्रावेश्शमनामृश्शमद्दानखानकमराष्ट्रसविनयकं सर्वजात-
परिवारकं च। एतैः परिहारैः परिहारै-

५. रेतच्च तत्क्षेत्रं परिवारं च। अत्र निबद्धलिपिः सुविज्ञेनाज्ञप्तामात्येन
शिवगुप्तेन [नि] क्षिप्ता। महाक्षामिभिरपरं क्षेत्रं

६. दत्तं पूर्वकसंवत्सरे १९ वर्षापक्षे ४ दिवसे . . तापासानां कार्यं॥ सि-
द्धम्। गोवर्धनेऽमात्यस्य अमकस्य देया राज्ञाज्ञप्तिः।

७. राज्ञो गोतमीपुत्रस्य शातकर्णेर्महादेव्याश्चार्यावासिष्ठ्या राजमातुर्व-
चनेन गोवर्धनेऽमात्यअमक आज्ञप्तिर्वक्तव्यः। गोवर्धनेति

८. ष्ठत्यत्राश्रमे पर्वतक्षिरश्रमावस्थद्वर्मदाने लयने प्रतिवसतां [ङ्घः] प्रव्र-
जितानां[तेभ्यः] भिक्षूणां[क्षुभ्यः] ग्रामे रक्षोदिक्षु पूर्वं क्षेत्रं दत्तम्। तच्च क्षेत्र-

९. मेकशतं स च ग्रामो नवशतो। एकशति यद्दानमत्तनगरसीम्नि रा-
जकक्षेत्रमस्मत्पैत्रकं तत एतस्य प्रव्रजितानां [तेभ्यः] भिक्षूणां [क्षुभ्यः] क्षिर-
श्रिमकन्दरे

१०. क्षेत्रस्य निवर्तनशतं १०० एतस्य च क्षेत्रस्य परिवारं वितरामोऽग्रावे
श्शमनामृश्शमद्दानखानकमराष्ट्रसविनयकं सर्वजातपरिवारकं च।

११. एतैः परिहारैः परिहारैरेतच्च तत्क्षेत्रं परिवारं च। अत्र निबद्धा लि
पिः सुविज्ञेनाज्ञप्तो प्रतिभारक्षितो राजामात्योऽलेखीत्। सवंत्सरे ५

१२. वर्षाणां पक्षे ४ दिवसे पंचमे ५ पूजितानां कार्यं। निबन्धो वृद्धः
संवत्सरे २४ ग्रीष्मपक्षे ४ ? दिवसे १०।

TRANSLATION.

To the Perfect One. Victorious is Senânî (leader of the army of the gods), who is on the gate of the Vijayatîrtha(1) in Govardhana. The prosperous Sâtakarni Gautamîputra, the lord of Dhanakataka, commands Vishnupâlita, the Royal officer in Govardhana: We grant to the men in the village(2) who have renounced the world, the field in the village (measuring) two hundred 200 *nivartanas*(3) which is to the south-west, and is at present enjoyed by Usabhadâsa. We grant the appurtenances also of this said field. It(4) is not to be entered on or interfered with by others, not to include what has been

granted (before) or may be dug out, and not to be subject to the rules (in matters of revenue) applicable to (other parts of) the country, and to include all(5) that may grow on it. [We grant] with these restrictions (various conditions) this said field and these appurtenances. This charter (*lit.* composition) is engraved by the Royal officer Sivagupta, at the dictation of a learned man. The great lord gave another field in the previous year, 19, on the . . . day of the 4th fortnight of Varshâ, for the sake of the ascetics.

To the Perfect One. This is a Royal command to be issued to Sramaka, the Royal officer in Govardhana. Sramaka, the Royal officer in Govardhana, should be given this command at the orders of King Sâtakarṇi Gautamîputra, and of the Great Queen(6) the honoured Vâsishṭhi, the mother of the King. Formerly a field was granted in the south-westerly direction in the village to mendicants who had renounced the world, living in the cave-temple, which is our benefaction, on Mount Triraśmi, the haunt (of ascetics) situated in Govardhana. That field measures one hundred, and the village, nine hundred. On the boundary of the town, at the place where the field measuring one hundred lies, there is a field belonging to the Crown which is our patrimony. Out of this field we grant one hundred *nivartanas* lying in the openings of Triraśmi(7) and the appurtenances of the plot. It is not to be entered on or interfered with by others, not to include what has been granted or may be dug out, and not to be subject to the rules applicable to (the other parts of) the country, and to include all that may grow on it. [We grant] with these restrictions (various conditions), this said field and its appurtenances. Pratibhârakshita, the Royal officer, engraved this charter here at the dictation of a learned man. In the year 24, 4th fortnight of Varshâ, on the 5 fifth day. For the sake of the worshipful (persons) this charter(8) was written (composed) on the 10th of the fourth? fortnight of Grishma in the year 24.

NOTES.

It will thus be seen that this inscription consists of two charters containing grants of land to the mendicant priests and recluses. The first was issued by Sâtakarṇi Gautamîputra, and the second by Vâsishṭhi his Queen. Dr. Stevenson thinks it to be a deed of sale executed by

the proprietor of Govardhana, as he calls him, conveying the field over which this cave is constructed to Gautamîputra's agent, and thinks the second part to be merely a repetition of the first. The cave is excavated out of the rock, and there could be no field there to convey. His translation therefore is wrong in many places.

(1). **गोवर्धनस्य** cannot be connected with **स्वामी**, since this latter forms the second part of a compound word. It must, therefore, be taken with the preceding. Vijayatîrtha must have been the name of a shrine or sacred place in Govardhana, and an image of Senânî must have been placed or carved out on its gate, as is not unusual in Hindu houses or temples.

(2). **अस्य** for **इमेस** seems to refer to the village spoken of in l. 2. The village must be one near Govardhana and Triraśmi.

(3). *Nivartana* is thus defined:—**दशहस्तेन दण्डेन चिंशद्दण्डा निवर्तनम्**, Bṛihaspati; **सप्तहस्तेन दण्डेन चिंशद्दण्डा निवर्तनम्**, Mâtsya, both quoted by Hemâdrî (Dânakh. Ed. Bib. Ind. p. 505).

(4). The epithets **अप्रावेश्यम्**, etc., qualify **क्षेत्रम्** in l. 3.

(5). **परिवारम्** l. 5 is in the accusative, wherefore **वितरामः** is to be understood, or the accusative may be connected with the **वितरामः** occurring in l. 3.

(6). If the expression **चजि** were taken as equivalent to **भार्या, वर्या** or some such word, the sense would be: "At the orders of the Great Queen of King Sâtakarṇi Gautamîputra, the honoured Vâsishṭhi."

(7). Triraśmi is used in the plural in Inscription No. 17. The name probably derived its origin from the fact that there are three hills in one line, detached from the adjoining ranges, on one of which the caves exist. Between these hills there are plains or valleys; and the field conveyed by Vâsishṭhi was perhaps in one of these.

(8). **निबन्धः**. This word originally signifies any piece of composition. It is then applied to the piece of composition issuing from a king. Hence the legal word **निबन्ध**, which signifies any hereditary office conveyed by a royal charter. The word is used in Inscription No. 18, l. 4.

No. 17.

१. सिद्धम् । राज्ञः क्षहरातस्य क्षत्रप[illegible]स्य नहपानस्य जामात्रा दीनीकपु-

चेण उषवदातेन त्रिगोशतसहस्रदेन नदी[1] वार्णासायां सुवर्णदानतीर्थकरेण देवताभ्यः ब्राह्मणेभ्यश्च षोडशग्रामदेन अनुवर्षं वाह्मणशतसाहस्रीं भोजापयित्वा

२. प्रभासे पुण्यतीर्थे ब्राह्मणेभ्यः अष्टभार्याप्रदेन भरुकच्छे दशपुरे गोवर्धने शोर्पारगे च चतुशालावसथप्रतिश्रयप्रदेन आरामतडाग उदपानकरेण द्वापारादा दमणतापीकरवेणादाहनुका[नां] नावा पुण्यतरकरेण एतासां च नदीनां उभतो[च]तीरं सभा-

३. प्रपाकरेण पींडितकावडे गोवर्धने सुवर्णमुखे शोर्पारगे च रामतीर्थे चरक[ण?]पर्षद्भ्यः ग्रामे नानगोले द्वात्रिंशत् नाढीगेरमूलसहस्रप्रदेन गोवर्धने चिरस्थिमषु पर्वतेषु धर्मात्मना इदं लेणं कारितं इमा च पोढियो भट्टारका आणतिया च गतोस्मि वर्षारतुं मालये .... हिरुधं उतमभद्रं मोचयितुं

४. ते च मालया प्रनादेनेव अपयाता उतम भद्रकानं च चत्रियानं सर्वे परियहा कता ततोस्मि गतो पोचराणिं तत्र च मया अभिसेकः कतो तिणि च गोसहस्रानि दतानि ग्रामो च.

No. 19.

दत्तं चानेन चेवं ब्राह्मणस वराहपुत्रस अग्निभूतिस हथे क्रीणितं मूलेन काहापणसहस्रेहि[1] चतुहि ४००० ये सपितसतकनगरसीमाय उतरापराय दिसाय एतो मम लेने वसतानं चातुदिसस भिखुसंघस मुखाहारो भविसति.

TRANSLATION.

To the Perfect One. This cave and these small tanks were caused to be constructed on the mounts Trirasmi(1) in Govardhana, by the benevolent Ushavadâta, the son-in-law of King Kshaharâta Satrap Nahapâna(2), son of Dinika, who gave three hundred thousand cows, presented gold, and constructed flights of steps on the river Bârnâsâyâ, gave sixteen villages to gods and Brahmans, fed a hundred thousand Brahmans every year, provided (the means of marrying) eight wives for

Brahmans at Prabhâsa(3), the holy place, constructed quadrangles(4), houses and halting-places at Bharukachchha, Daśapura, Govardhana and Sorparaga, made gardens, tanks and wells, charitably enabled men to cross Ibâ, Pârâdâ, Damanâ, Tâpî, Karabeṇâ, and Dâhanukâ by placing boats(5) on them; constructed Dharmaśâlas and endowed places for the distribution of water, and gave capital worth a thousand for thirty-two Nâḍhigeras(6) for the Charanas(7) and Parishads in Pinditakâvaḍa, Govardhana, Suvarṇamukha, Sorparaga, Râmatîrtha and in the village of Nânagola. By the command of the Lord I went in the rainy(8) season to Mâlaya to release Hirudha the Uttamabhadra(9). The Mâlayas fled away at the sound (of our war music), and were all made subjects of the Kshatriyas, the Uttamabhadras. Thence I went to Poksharaṇi, and there performed ablutions, and gave three thousand cows and a village.

Notes.

The first part of this inscription is in Sanskrit. The latter part contains a mixture of Sanskrit and Prakrit.

(1). For Triraśmi see note, l. 10, No. 26, and l. 9, No. 25.

(2). I think upon the whole this way of interpreting the expression is more in consonance with known facts than making Nahapâṇa satrap of a king named Kshaharâta.

(3). Prabhâsa, as Dr. Stevenson says, is a place near Pattan Somnath, or Somath itself. Bharukachchha is now known to be Broach. Daśapura must be some place in Gujarat or in the Marathî country bordering on Gujarat. It occurs in Inscription No. 1. Sorparaga is Supara near Bassein. The Damanâ and Dâhanukâ must be rivers flowing into the sea at those places in the Tanna District. Tapî is well known. The others I am not able to identify. Râmatîrtha is, I am told, a small place near Sopara. Ushavadâta's charities do not seem to have gone further to the north than Gujarat, or further to the south than the northern district of the Poona Zillah. The expedition to the south described in the Inscription was occasional, the object being to assist a friendly race of Kshatriyas.

(4). चतुः शाला is a house with an open quadrangle in the middle and halls on four sides. It has an entrance in each of the four directions चतुः शालं चतुर्द्वारैरलिन्दैः सर्वतोमुखम् ॥ नाम्ना तत्सर्वतोभद्रं

शुभं देवनृपालये, Mâstya Pur. प्रतिश्रय is what is in these days called an अन्नसत्र, a place where travellers put up and are fed without charge.

(5). °दाहणुकानावापुण्यतरकरेण. दाहणु or दाहणुका may be taken as one name, and कानावा or नावा another, and the words पुण्यतरकरेण as forming one compound with them and the rest. But the word नावा is here in such a position that one cannot but think it was intended to signify a "boat." Then नावा would be instrumental singular, and would stand at the end of the long compound. But the several rivers could not have but one boat; and if the word नौ formed part of the compound, the sense would not be appropriate, for it would appear as if what Ushavadâta did was to render the "passage across" possible by means of the boats of Ibâ, Pârâdâ, etc.; but the sense required is not the *boats* of Ibâ, Pârâdâ, but the *passage* of Ibâ, Pârâdâ, etc., *by means of a boat.* Hence I think there ought to have been one ना more, with a dot above it, so as to make it °दाहणुकानां नावा पुण्यतर-करेण; and probably that letter must have been omitted by the engraver through mistake, as writers often do when they have two or more similar letters to write in succession.

(6). द्वाचिंशन्नाढीगेरमूलसहस्र. I have translated the expression as in the text, since there is a similar expression in No. 16 (चीवरिक [illegible]णमूलं), and in No. 18, in the last line, which must be so translated. I do not know what sense to attach to नाढीगेर or नाडीगेर as it is written in No. 16. Since even in this Sanskrit inscription the word stands thus, it must signify something which was usually called by this name alone, and not by its Sanskrit analogue, supposing it had any. Perhaps it may be traced to नान्दीगृह, a place where anything religiously auspicious was performed, since the gift is to Charanas and Parishads. Dr. Stevenson's supposition that it signifies some currency will not do at all.

(7). I think we must read here चरण instead of चरक.

(8). वर्षारतु is intended in this Sanskrit-Prakrit inscription for वर्षाऋतौ or वर्षर्तौ.

(9). This was the name of the Kshatriya race whom Ushavadâta went to assist.

Dr. Stevenson's translation of this is correct except in three or four places.

No. 19.

This forms portion of No. 17, and is mostly a mixture of Prakrit and Sanskrit, like the latter part of No. 17.

अग्रिभूतिस हथे = अग्रिभूतेर्हस्ते "in the hands of Aśribhûti." This expression occurs in l. 5 of No. 12, and l. 13 of No. 26A. Since the body of mendicants was itinerant, it was necessary to entrust the benefactions to some persons.—**यसपितसतक**. This expression seems to correspond to **यत्सप्तशतकं**, and must be taken to qualify **चेचम्**. The meaning would then be, "which field measuring seven hundred" (probably *nivartanas*). The usual Prakrit representative of **सप्त** is **सत**, but **सपित** is not unlike the character of this inscription, which is rather corrupt Sanskrit than Prakrit. Or, **सपितसतकनगर** may be taken as one noun forming the name of a place. I was told at Nâsik that there is a place of the name of **सतपुर = सप्तपुर** in the vicinity.—**वसतानं भिखुसंघस = वसतां भिक्षुसंघस्य**; not good grammar.—**मुखाहारो**. I saw a faint perpendicular stroke below, representing the vowel **उ**. The expression seems to signify "the chief sustenance." (Compare the use of **अग्र** in **अग्रहार**.) It may be taken as corresponding to **मुख्याहारो**. Or if the stroke is not real, the expression is **मगाहारो = मार्गाहारो** "provision for journey." But beggars can hardly be under the necessity of taking provisions with them while on a journey, for they go begging.

The Sanskrit of the inscription is therefore as follows:

दत्तं चानेन चेत्रं ब्राह्मणस्याग्रिभूतेर्हस्ते क्रीतं मूलेन कार्षापणसहस्रैश्चतुर्भिः ४००० यत्सप्तशतकं नगरसीमाया उत्तरापरायां दिशायाम्। एतस्माच्चम लयने वसतश्चातुर्दिशस्य भिक्षुसंघस्य मुखाहारो भविष्यति.

TRANSLATION.

He, Ushavadâta, has also given a field in the possession [*lit.* in the hands] of Aśribhûti, the son of a Brahman (named) Varârha. It was bought for the sum of four thousand Kârshâpaṇas, measures seven hundred, and is in the north-westerly direction from the boundary of the town. This shall be the chief support of mendicant priests from the four quarters residing in my cave.

NOTES.

Dr. Stevenson's translation of this is altogether wrong. The grantor,

according to him, was a person whose father was from the city of Sataka, and mother of the province of Uttarârha. He seems to have divided the words beginning with **य** thus:—**यस पित सतकनगरस माय उतराहरय**, and in doing so he neglected the grammar of the sentence, the text, and the following word **दिसाय**. He was, however, misled to some extent by the copy of the inscription he had before him. He also represents the donor to have given "a cave to the dejected," and speaks of "a sin-removing abode for the Buddhistic priesthood."

No. 18.

१. उषवदातेन संघस चातुदिसस इमं लेणं नियातितं दता चानेन अचय निवि काहापणसहस्रा

२. एते च काहापणा प्रयुता गोवधनवाथवासु श्रेणिसु कोलिकनिकाये २००० वुधि पडिकशतं अपरकोलिकणिका

३. एतो मम लेणे वसवुथानं भिखुनं वीसिय एकैकस चिवरिकं वार-षिकं ये सहस्रं प्रयुतं पायुनपडिके[क]शते अतो कुसण

४. स्रावितं निगमसभाय निबंध[धो] च फलकवारे चरिचं तोति भूयो-नेन क्रतं वसे ४१ कातिकशुधे पनरसे पुवाकवसे ४०.

५. पनरसनियुतं भगवतां देवानं ब्राह्मणानं च कर्षापणसहस्राणि सतरि ४००० पंचविंशकसुवर्णकतादिनं सुवर्णसहस्राण[णि] मूल्लं.

Line 1. **दता**. This looks like **दतं** in the original, but there is little doubt that it must be **दता**.—**अचय निवि**, or properly **नीवि** is "permanent capital."—**काहापणसहस्रा**. Though there is no mark of the obliteration of any letters after this, still there is no doubt some are wanted at the end of the first and second lines and perhaps of the third. Probably at some later time somebody must have smoothed off that part of the rock. At the end of this first line what is wanted is the number of the sahasrâs or thousands bestowed and also the termination **नि** (**णि**) after **सहस्रा**.

Line 2. **प्रयुता** = **प्रयुक्ता** "laid out at interest, invested."—**वाथवासु** = **वास्तव्यासु**.—**वुधि** = **वृद्धि** "interest."—**पडिक** = **प्रतिक** "what is worth a Kârshâpaṇa" (see Vârtika on Pan. v., 1, 25). After **निका**, **ये**

and words expressive of the amount deposited or invested, together perhaps with that of the interest, are required.

Line 3. **वसवुथानं**. This is to be traced to **वर्षावास्तूनाम्**. The word **वसावथस** occurs in Inscription No. 12. Buddhistic mendicants generally wandered about during fair weather, and resided in one place during the four rainy months; and then they held what was called their *vass*, corresponding to **वर्षा**, and read what was called *bana* (see Hardy's Eastern Monachism, chap. xix.). **वीसिय = विंशत्या**. For it is clear (see translation) that he left two thousand Kârshâpaṇas for providing chîvarikas. The donor in Inscription No. 12 leaves a hundred Kârshâpaṇas, and directs that the one mendicant residing in his cave should be provided with a chîvarika; so that if one hundred suffices for *one*, two thousand ought to suffice for *twenty*. And the cave in which this inscription occurs has accommodation for so many, for there are sixteen cells in the interior, and two larger ones at the two ends, each of them sufficient for two.—**चिवरिक**, or properly **चीवरिक**, is the garment worn by Buddhistic mendicants. **वारसकं = वार्षिकं**, meaning "belonging to or given in the rains" or "annual." The robing month among the Buddhistic mendicants was the third of the rainy season, when laymen presented garments to them (see Hardy, chap. xii.). That was a regular ceremony; hence these gifts. Endowments of this nature are recorded in Inscriptions Nos. 12 and 21, and in Nos. 16, 18, 24, 39, 44, at Kenery (see Mr. West's copies, Journ. B.B.R.A.S. vol. vi.), in which latter the words **अखयनीवि, पडिक, वसवथस, चीवरिक**, and **वारसक** occur. In the first of these (No. 16) we have distinctly the words **एतो च वसारते वसतस भिखुणो चिवरिक = एतस्माच्च-वर्षाऋतौ वसतो भिक्षुकस्य चीवरिकम्**।—**पायुन**. I take this to be equal to **पादोन** "less by a quarter." The interest of two thousand was one hundred; of this capital "a quarter less," *i.e.* seventy-five.—**कुसण**. I have not been able to determine the sense of this word; but probably it means something connected with the Buddhistic rite of *Kasina* (Spence Hardy's East. Mon. chap. xxi.).

Line 4. **निगमसभाय**. Instr. sing. = "by the assembly or corporation of the town," or "by the townspeople generally." It may be taken as Gen. or Loc. Sing. also.—For **निबंधो** see note, Inscription No. 25.—**फलकवारे**. **वार** means "a door" (see note, Inscription No. 25), and **फलक** "a slab," "the door of a slab of stone." It should rather be **वारफलके** = "on the slab of the door" (see note 6, Inscr. No. 26).—**तोति** =

स्तौति. After the figure for 40 there is a vertical stroke, which does not seem to signify anything; or if it does, it perhaps shows that there is no odd number after 40.

Line 5. भगवतां is not Prakrit.—सतरि is a mistake for चतरि.—सुवर्णकतादिनं. It is difficult to say what कतादि or तादि corresponds to.

SANSKRIT OF No. 18.

१. उषवदातेन संघस्य चातुर्दिशस्येदं लयनं निर्यातितम्। दत्ता चाने नाक्षयनीविः कार्षापणसहस्रा [णि ३०००?]।

२. एते च कार्षापणाः प्रयुक्ता गोवर्धनवास्तव्यासु श्रेणीषु। कौलिकनिकाये २००० वृद्धिः प्रतिकशतम्। अपरकौलिकनिका [ये १०००?]।

३. एतस्मान्मम लयने वर्षावास्तूनां भिक्षूणां विंशत्या एकैकस्य चीवरिकं वार्षिकम्। यत्सहस्रं प्रयुक्तं पादोनप्रतिकशतेऽतः कुशनम्।

४. आवितं निगमसभया निबन्धश्च फलकद्वारे चरिभं स्तौति। भूयोऽनेन दत्तं वर्षे ४१ कार्तिकशुद्धे पञ्चदशे पूर्वकवर्षे ४०.

५. पञ्चदशनियुते भगवतां[ऋषभः] देवानां[वेभ्यः] ब्राह्मणानां[णेभ्यः] च कार्षापणसहस्राणि चत्वारि ४००० पञ्चविंशक सुवर्ण .... दीनां सुवर्णसहस्राणि मूलम्।

TRANSLATION OF No. 18.

This cave has been dedicated by Ushavadâta to the [mendicant] priesthood of the four quarters. He has also given a permanent capital of [3000 three(1)] thousand Kârshâpaṇas. These Kârshâpaṇas are deposited with the guilds residing in Govardhana; with the body of weavers 2000, interest a hundred Kârshâpaṇas; with the other body of weavers [1000 a thousand]. From this [interest should be given] a garment in the rainy season to each of the twenty mendicants residing during the rains in my cave. From the thousand(2) laid out at an interest of three-quarters of a hundred Kârshâpaṇas, kuśana [should be provided]. This good deed has been published in the assembly of the town (or amongst the townspeople), and this inscription on the slab-door praises it. Moreover, in the year 41, on the

fifteenth of the bright half of Kârtika, and in the previous year 40, on the fifteenth, he gave 4000 four thousand Kârshâpaṇas and a capital of thousands of Suvarṇas for [the acquisition of] thirty-five golden *katadis*, to the worshipful gods and Brahmans.

NOTES.

(1). I gather that the sum he deposited was three thousand from Inscription No. 16, which also mentions this endowment.

(2). This must have been the thousand deposited with the other body of weavers.

Dr. Stevenson's translation of this is wrong, with the exception of that of the first line. He did not understand चोवरिकं, बारसकं, वुधि, श्रेणी, and such other words.

No. 16.

१. सिधं रणो चहरातस चत्रपस नहपानस दीहि-

२. तु दीनीकपुत्रस उषवदातस कुटुंबिनीय दखमित्राय देयधमं उ[illegible]
रको

३. सिधं वसे ४२ वेसाखमासे रणो चहरातस चत्रपस नहपानस [illegible]मा-
तरा दीनीकपुत्रेण

४. नि तिणि ३००० संघस चातुद्दिसस य इमस्मिं लेणे वसात[illegible]नं भवि-
सति चिवरिककुशणमुलं च-

५. ये १००० वधि पायुनपडिकशतं एते च काहापणा [illegible]पडिदातवा
वधिभो[भा]जा एतो चिवरिक सहस्रानि बे २००० ये पडिके[illegible]क]सते[त]-

६. मुलं कापुराहारे च गामे चिखलपाद्रे दतानि नाडि[illegible]गेरानं मुलसह-
स्रानि अठ ८००० एतं च सर्वं फलकवारे चरिचं तोति.

The first two lines of the above form an indep[illegible]ndent inscription, which is the same as No. 20.

उवरको from अपवरकम् "an inner [illegible]apartment." From the same word comes ओवरी *f.* a provincial [illegible]Marathî word having the same sense.

TRANSLATION OF No. 16, LINES 1, 2.

To the Perfect One. This apartment is the benefaction of Dakhamitrâ, the daughter of King Kshaharâta Satrap Nahapâna and wife of Ushavadâta, son of Dînîka.

Line 4. नि तिणि. Two or more letters which are required before the first नि must have dropped. There is, however, no indication of the existence of any in the original. दत्ता at least is wanted so as to make the first word दत्तानि.—वासातानं. This may be the genitive of the present participle वसत् Sk., वसन्त Pr., or may be equivalent to वर्षाण्यानः "living during the rains."

Line 5. वधिभोजा or वधिभाजा,= वृद्धिभाजः "bearing interest."

As to the rest, see notes on No. 18.

SANSKRIT OF No. 16, LINES 3–6.

३. सिद्धम् । वर्षे ४२ वैशाखमासे राज्ञः क्षहरातस्य क्षत्रपस्य नहपानस्य जामात्रा दीनीकपुत्रेण

४. [दत्ता]नि त्रीणि ३००० संघस्य[घाय] चातुर्दिशस्य योस्मिन्लेणे वसतां [or वर्षाण्यानो] भविष्यति चीवरिककुशनमूलम् । च-

५. ये १००० वृद्धिः पादोनप्रतिकशतम् । एते च कार्षापणा अप्रतिदातव्या वृद्धिभाजः । एतस्माच्चीवरिकसहस्रे द्वे २००० ये प्रतिकशत-

६. मूलम् । कापुराहारे च ग्रामे चिखलपाद्रे दत्तानि नाडिगेराणां मूलसहस्राण्यष्ट ८००० । एतच्चसर्वं फलकद्वारे चरित्वं स्तौति ।

TRANSLATION OF No. 16, LINES 3–6.

To the Perfect One. In the year 42, in the month of Vaiśâkha, the son of Dînîka, and son-in-law of King Kshaharâta Satrap Nahapâna, gave three thousand 3000 to the priesthood from the four quarters residing(1) in this cave during the rains, as capital for [providing] garments and kuśana. Out of this sum, on 1000 the interest is three-quarters of a hundred [*i.e.* 75] Kârshâpaṇas(2). These Kârshâpaṇas,

bearing interest are not to be repaid. Out of this [sum] two thousand, which is the capital bearing an interest of one hundred Kârshâpaṇas, is for garments(3). A capital of 8000 for Nâḍigeras was given in Kapurâhâra and the village of Chikhalapâdra. All this [inscription] on the slab-door praises the good deeds.

NOTES.

(1). The syntactical connexion, when वसतां is the reading, is °अस्मिञ्ँयने वसतां यः संघो भविष्यति तस्मै संघाय दत्तानि। With वर्षास्थानः there is no difficulty.

(2). Out of this interest *kuśana* was to be provided (see No. 18 and below).

(3). *Lit.* "Two are chîvarika-thousands, those that are the capital bearing an interest of 100 Paḍikas." चीवरिकार्थं सहस्रं चीवरिकसहस्रं ते।

From this and No. 18 it appears clear that Ushavadâta gave three thousand Karshâpaṇas;—two deposited with one body of weavers, bearing an interest of 100 Paḍikas or Kârshâpaṇas, from which chîvarikas or garments were to be provided, and one with another body of weavers, bearing an interest of 75 Paḍikas, out of which kuśana was to be given. Lines 4 and 5 of this and 3 of No. 18 are thus consistent with each other.

We see from the above that the cave was dedicated to the use of mendicants in the year 42, and from No. 28 that Ushavadâta bestowed other charities in the years 41 and 40. What era these are to be referred to will be considered in the remarks.

Nearly the whole of Dr. Stevenson's translation of this is wrong.

No. 14.

१. तस चत्तपस नहपानस जामा
२. शकस उषवदातस नेत्यकेसु
३. चेचिके दाहनुकानगरे केकापुरे
४. के अनुगामिह्मि उजनिय सीखाय
५. गवतो ब्राह्मणा भुजतो सतसाह

६. गवतो ब्राह्मणानं[1] गवां[1] सतस
७. यता द्वानं[1] ब्राह्मणानं च दता
८. चेत्र सुधे पनरसे चहरा
९. न गवां शतसहस्रदेन उष
१०. रहण नदीय वणासाय द
११. सुध २ तिथ चषेयते तस
१२. चीत

These lines are complete on the right-hand side, but incomplete on the left, the rock having broken off on that side. There is, therefore, not one sentence complete. Still the general sense is clear, as will be seen from the following

TRANSLATION OF No. 14.

1. Son-in-law of Satrap Nahapâna ———t
2. Usual deeds of Ushavadâta, the Śaka(1)
3. In Checkika, city of Dâhanukâ, Kekâpura
4. In each village, in Ujjayinî(2), Sikhâ
5. [Feeding] a hundred thousand worshipful Brahmans
6. [Giving] a hundred [thousand] cows to the worshipful Brahmans
7. Given to gods and Brahmans
8. On(3) the fifteenth of the bright half of Chaitra, Kshaharâ
9. Usha[vadâta] who gave a hundred thousand cows
10. On the river Baṇâsâ
11. 2nd of bright half

The inscription thus appears to be of the nature of No. 17, recording nearly the same charities.

NOTES.

(1). This has been usually taken to be Śaka, as if there were no doubt about it, but it is not quite safe to do so in the mutilated state of the inscription.

(2). This is not without doubt.

(3). Another inscription seems to begin here, since Kshaharâta appears again.

No. 6.

१. सादवाहनकुले कण्हराजिन नासिककेन
२. समणेण महामातेण लेणं[1] कारितं[1]

SANSKRIT.

१. शातवाहनकुले कृष्णराजस्य नासिककेन
२. श्रमणेन महामात्रेण लयनं कारितम।

[This] cave was caused to be constructed by the Śramaṇa officer of Krishṇa-râja of the Sâtavâhana race, residing in Nâsika.

कह्ण is well known to be the Prakṛit form of Kṛishna (Var. iii. 33). नासिकक belonging to or inhabitant of Nâsika. The termination वुञ् or अक is added upon the analogy of the words embraced in Pan. iv. 2, 121–130. This inscription is not translated by Dr. Stevenson.

This Krishṇa-râja was the second king of the Ândhra-bhṛitya dynasty of the Purâṇas, as will be shown in the remarks.

No. 3.

१. सिधं रणो वासिठिपुतस सामि सरिपुलु-
२. माइस संवछरे २ हेमंतपखे ४ दिवसे
३. एतिय पुवाय ट[क]टुंबिकेण धनमेण दिण.
४. —

To the Perfect One. In the year 2 of the King, the Lord, the prosperous Pulumai, the son of Vâsishṭhi, in the 4th fortnight of Hemanta, on — day. Before this, by the householder or husbandman Dhanama.

No. 27.

१. सिधं रणो वासठिपुतस सरपडुमयस सवछरे छ? ठे ६ गिमपखे पचमे[1] ५ दिवसे.

To the Perfect One. In the sixth year of the King, the prosperous Paḍumaya, the son of Vâsishṭhi, in the — fortnight of Grishma, on the fifth? day.

No. 4.

१. सिधं रणो गोतमिपुतस सामिसिरियणसतकणिस संवसरे सातमे ७ हेमंतणपखे ततिये ३

२. दिवसे पंचमे केसिकस महासेणापतिस च[भ]वगोपस भरिजाय महासेणापतिणिय वसुय लेणं

३. बोपकियतिस जमाने[मन?]स पयवसितं समणे बङकानि वरिसाणि उकुते पयवसाणं नितं चातुदि-

४. सस च भिखुसंघस आ[अ]वने दतेति.

Line 2. वसुया. वसु or वसू may be the name of the lady or a term of honour used in her case, as चस or वस in the case of those spoken of in Inscription No. 24. Probably the वासू of dramatical language is the same as this.

Line 3. बोपकियतिस जमनस = बोककियतेर्यमनस्य. Or if the स, which with the vertical stroke looks like अ, is to be so taken, बोपकियति अजमानिस = बोपकियति आर्यमान्यस्य. This will not necessitate माने being considered a mistake for मन. उकुते = उत्कृत्य. उत्कीर्य is the word we should expect to find in such a case; but कृत् has the sense of "cutting," and with उत्, of "cutting out," which would do very well in the present case. ते in उकुते is the representative of तिअ = त्य.

Sanskrit of No. 24.

१. सिद्धम् । राज्ञो गौतमीपुत्रस्य स्वामिश्रीयज्ञशातकर्णेः संवत्सरे सप्तमे ७ हेमन्तपक्षे तृतीये ३.

२. दिवसे पञ्चमे केशिकस्य महासेनापतेर्भवगोपस्य भार्याया महासेनापत्न्या वस्वा लयनम् ।

३. बोपकियतेर्यमनस्य पर्यवसिते श्रमणे वङ्कानि वर्षाण्युत्कृत्य पर्यवसानं नीतं चातुर्दि-

४. शस्य च भिक्षुसंघस्यावने दत्तमिति.

Translation of No. 24.

To the Perfect One. On the fifth day, in the 3rd third fortnight of Hemanta, in the 7th seventh year of the King, the Lord, the prosperous Yajna Sâtakarṇi, Gautamîputra, the Cave of Vasû, Lady(1) Senâpati, the wife of Bhavagopa, the Senâpati (commander-in-chief), inhabitant of Keśi was, the Śramana(2) having died, carried to completion, after having been under excavation for many years, for [or by] Yamana(3), the ascetic of Bopaki [or for the ascetic of Bopaki honoured by good men], and given for the use [*lit.* protection] of mendicant priests from the four quarters.

Notes.

1. She is called **सेनापत्नी**, not because she commanded any army, but because she was the wife of the **सेनापति** or commander of the army. The only way I can think of, of conveying this sense when another expression **भवगोपस्स भार्या** has also to be translated, is that adopted in the text.

2. The Śramaṇa must have been the husband of the lady.

3. I am not quite satisfied with this. I was attempting so to construe the expression **वोपकियतिस जमानेस** as to yield the sense "having done so-and-so, or while this was doing, the Śramaṇa died;" but have not succeeded. So the best way is to take the genitive and interpret it by the prepositions "for" or "by." And there is Hemachandra's authority for it. **तादर्थ्ये ङेर्वा। तादर्थ्ये विहितस्य ङेरतुर्थ्येकवचनस्य स्थाने षष्ठी भवति। क्वचिद्द्वितीयादेः। . . . स्थाने षष्ठी भवति।**

Dr. Stevenson's translation of this is mistaken in many places. He takes the third line to consist of names only.

Who is the Gautamiputra here spoken of? Dr. Stevenson translates "descendant of King Gotamiputra." But there is no word here which means "descendant." And this King Yajna is called Gautamîputra in the other inscriptions in which he is named (see Kenery Caves, No. 44, Journ. B.B.R.A.S. vol. vi.). It appears to have been a custom in the case of these kings to apply to them an epithet expressive of their being the sons of certain mothers. The Great Gautamîputra was so called because he was the son of Gautamî, though his real name was Sâtakarṇi. Puḍumâyi was called Vasishṭhî-

putra because he was the son of Vasishṭhî. In the same manner, Yajna Sâtakarṇi must have been called Gautamîputra because his mother also was named Gautamî.

No. 15.

The language of this inscription is Sanskrit, with the exception of but a few words. It is considerably mutilated towards the end. Even in the first part the letters are not fully formed, and have to be determined by the sense and context. In most cases, however, my readings are obvious, and can admit of little doubt.

१. सिधं। राज्ञो दमरीपुत्रस्य शिवदत्ताभीरपुत्रस्य
२. आभीरस्य वीरसेनस्य संवत्सरे नवमे गि-
३. म्हे पखे चोथे ४ दिवसे चयोदशे १३
४. यापुवयागकर्णवर्मणः दुहित्रा गणपक-
५. रेभिलस्य भार्यया गणपकस्य विश्ववर्मस्य
६. भातृकनि[न्य]कया उपासिकया विष्णुदत्तया सर्वसत्वहि-
७. तसुखार्थं चिरश्मिपर्वतविहारवास्तव्यस्य चातुर्दिश-
८. भिक्षुसंघस्य — — भेषजार्थमचयनीवी प्रयुक्ता वि[ध?]नवा[स्त]-
९. व्यासु आगतानागतासु श्रेणीषु। यतः कुलरीकश्रेण्या हस्ते कार्षपण
१०. सहस्रं १००० — यांत्रिकश्रेण्यां सहस्राणि[स्रे] द्वे २ . . . .
११. ण्यां शतानि पंच ५०० तिलपिषकश्रेण्यां शता . . . . . .
१२. एते च कार्षापणा चताला पदा . . ण्यदिव . . . .
१३. — . . तस्य म सवृद्धिकं सवरत्नतिविद्व . . . .

1. शिव is doubtful.

4. यापुवयाग is unintelligible. कर्णवर्मणः may be °काग्निवर्मणः in which case the name is अग्निवर्मन् and the क the last syllable of the preceding word.

6. कनिकया is very likely कन्यकया. The first two letters are unintelligible, but they may have been intended for भातृ or कृत, so that the whole compound is भातृकन्यकया or कृतकन्यकया.

8. The three letters after संघस्य are unintelligible. They may

have been intended for भिचूणाम् or वसनम्.—धनया. One or two letters are lost here. Probably the word was गोवर्धन.

9. कुलरीक was probably intended for कौलिक.

10. The first two letters before यांत्रिक are unintelligible. They may have been intended for वेणु. This and the succeeding lines have lost a good many letters.

Translation.

To the Perfect One. On the 13th day of the fourth fortnight of Grîshma in the 9th year of the king Vîrasena, the Abhîra, the son of Śivadattâbhîra and of Damarî, a permanent capital was deposited as follows with the guilds residing now or in future in Govardhana? by the worshipper Vishṇudattâ, the daughter of Karṇavarman, wife of Rebhila Gaṇapaka (the leader of a host), and niece (or adopted daughter) of Viśvavarma Gaṇapaka (the leader of a host), for the benefit and good of all creatures, and for providing medicine to the body of the mendicant priests residing in the caves on mount Triraśmi:—A thousand Kârshâpaṇas with the guild of the weavers, two thousand with the guild of the —— engineers, five hundred with the guild of ——, and —— hundred with the guild of the grinders of sesamum (oilmen). These Kârshâpaṇas —— together with interest ——

This is a new inscription, and was not translated before.

No 1.

१. सिधं शकस दामचिकस लेखकस वुधिकस

२. विष्णुदतपुत्रस दशपुरवाथवस लेणं पो-

३. ढियो च दो २ अतो एका पोढिया अपर . . . स मे माता.

४. . . . . तरो उदिस

To the Perfect One. [This] cave and [these] two tanks are [the benefaction] of the Śaka Dâmachika, writer [or engraver] and usurer [or carpenter], son of Vishṇudatta and inhabitant of Daśapura. One of these tanks . . . . . is intended for [the spiritual good of] my father and mother.

? Daśapura

वुधिकस = वृद्धिकस्य probably "an usurer," or = वर्धक "a carpenter." वाथवस = वास्तव्यस्य. उदिस = उद्दिश्य.

No. 2.

१. सिधं सकश दामचिकस

२. लेघकस वुधिकस पोढि

To the Perfect One. Tank of Dâmchika, the S'aka, writer [or engraver] and usurer [or carpenter].

No. 5.

१. देयधर्मोयं[.] उपासि-

२. काया मर्म्माया लयनं

This cave is the benefaction of Marmâ, a worshipper.

No. 8.

१. नासिककनंधभिकगामस दानं[.].

Benefaction of Nandhabhikagâma, inhabitant of Nâsika.

Nos. 9 AND 10.

These two are parts of one inscription, both together forming but one sentence. No. 10 is the first and No. 9 the second part.

१. रायामच अ[स]रहल[ली?]यस वलिसीलने[ण]कस दुहुतुय महाहकुसी-

२. य तटपालिकाय रायामचस अगियतणकस तटाकाराकी-

३. यस भारियाय कपणणकमातुय चेतियघरं[.] पवते

४. त[ति]रण्हम[ह्मि] णिठपापितं[.]

L. 1. The first letter does not occur in Mr. West's copy. Lieut.

Brett's has it. The initial letter of the second word, read as **अ**, may have been intended for **स**, in which case we have the genitive **रायामचस**.—In **रहजयस** the **ल** may have been intended for **ली**, in which case the expression would mean "native of **रहल**." In such inscriptions it is usual to mention the native places of the persons named.—**णक**. This syllable occurs at the end of each of the three names of men. Very likely it is an honorific termination corresponding to our modern Marathi **नाक** appended to the names of mahârs, and traced to the Sanskrit **नायक**.—**कुसीय**. This may be **कासीय** or **केसीय**.

L. 2. **तटपालिकाय** = **तटपालिकया** or **भटपालिकया**. The first means "protectress of a fortress" and the second "of soldiers," but **भटपालिका** is an unusual expression. Perhaps it is **तटपालकीय** used as an attribute of the following noun, and meaning "native of" or "residing in **तटपालिक**." **तटाकाराकीयस** = "native of **तटाकारक**" perhaps, but it would not do to take it so if the word **तटपालकीय** were to be interpreted as proposed last. This word, however, may be read as **भद्राकारकियस** = **भद्राकारक्रियस्य**, "one whose look and deeds are commendable." In this inscription no difference is perceptible between the letters *t* and *bh*.

Ls. 3, 4. Some vowel-marks, which undoubtedly are required, are wanting. I have not attempted to reduce the proper names to their corresponding Sanskrit forms.

SANSKRIT.

१. राजामात्यस्य रहजीयस्य वलिसीलणकस्य दुहित्रा महार्हकुश्या
२. तटपालकीयराजामात्यस्यागियतणकस्य भद्राकारक्रि-
३. यस्य भार्यया कपणणकमात्रा चैत्यगृहं पर्वते
४. त्रिरश्मौ निष्ठापितम् ।

TRANSLATION.

This chaitya-temple was established on the mountain Triraśmi by the worthy Kuśî, the daughter of Baliśîtanaka, the king's officer, residing in Rahula, the wife of Agiyatanaka, the king's officer residing in Tatapalika, whose look and deeds are commendable, and the mother of Kapanaka.

Dr. Stevenson treated these as two separate inscriptions. I need not make any remark on his translations of them.

No. 11.

१. सिधं ऊतराहस दतामितियकस योणकस धंमदेवपुतस इंद्राग्निदतस
धंमत्मना[नो]·

२. इमं लेणं[.] पवततिरएहम्हि खानितं अभंतरं च लेणस चेतियघरं पो-
ढियो च मातापि-

३. तरं उदिस इमं[.] लेणं कारितं सवबुधपुजाय चातुदिसस भिखुसंघस
नियातितं स-

४. हपुतेन धंमरखितेन

To the Perfect One. This is the cave of the charitable Indrâgnidatta, the son of Dharmadeva, a Northerner, a Yavanaka, native of Dâttâmitrî, excavated on Mount Triraśmi. The interior of this cave is a shrine for a Chaitya, and there are tanks also. This cave was caused to be constructed with a view to [the spiritual good of] mother and father, and is dedicated to the mendicant priesthood of the four quarters, for the worship of all Buddhas, by Dharmarakshita and his son.

ऊतराह = औत्तराह "belonging to or inhabitant of the North" (Vârt. on Pân. iv. 2, 104). दात्तामित्री was the name of a town in Sauvîra in the vicinity of Sind. In the Sid. Kaum. this is given as an instance of a Sauvîra town under Paṇ. iv. 2, 76.

Dr. Stevenson's translation of this contains several mistakes. He makes the father of the donor "prince regnant under Datamitraka."

This inscription shows how wide the fame of our Triraśmi was spread. It also points to the settlement of the Greeks near Sind and to their adoption of Buddhism. दत्तामित्री may be Demetria.

No. 12.

१. वेलिदतपुतस नेकमस रामणकस

२. कोकलेपकियस लेनं देयधंम चातुदि-

३. सस भिखुसंघस नियातितं दत[ता] च[चा]-

४. नेन अखयनिवि काहापनसतं १००

५. संघस हथे एतो वसवथस पवद्दतस चिवरि-

६. कं दातवं वारसकं

This cave is the benefaction of Râmaṇaka, a merchant, native of Chhâkalapaka. It is dedicated to the mendicant priesthood of the four quarters. He has also given a permanent capital of a hundred Kârshâpaṇas into the hands of the townspeople. From that a garment should be given in the rainy season to the ascetic living here during the rains.

नेकम is very likely नैगम "a merchant." संघ in the fifth line may mean "the congregation of the mendicant priests." For the rest see notes to Inscription No. 18.

Dr. Stevenson's translation differs a good deal from this.

No. 13.

१. सिधं सिवमितलेखकपुतस

२. रामणकस लेणं देयधंम

To the Perfect One. [This] cave is the benefaction of Râmaṇaka, the son of Sivamitra, the writer.

No. 21.

१. खातिक उपासकियस मुगुदासस सपरिवारस लेणं देयधम एतस लेणस बोधिगुत-

२. उपासकस पुतेन धमनंदि नादतं खेतं अपरिलीय कण्हहिनिय एतो च खेततो चिवरिकं पवद्दत ....

This cave is the benefaction of the worshipper Mugudâsa, a Khâtika (a butcher) (1) and his family. Dharmanandi, the son of the worshipper Bodhigupta, has given a field in the Western (2) Kaṇhahini for this cave. From this field a garment [to] an ascetic.

(1). खातिक may have been the name of a tribe. It may also correspond to कौटिक "a butcher." The vernacular word for a butcher, खाटिक or खाटकी, is very near to this.

(2). अपरिलीय—इल्ल is a termination applied to nouns in the sense of "belonging to," or "existing in." डिल्लडुल्लौ भवे । भवेर्थे नाम्नः परौ इल्ल उल्ल इत्येतौ डितौ प्रत्ययौ भवतः । ... पुरिल्लं ... उवरिल्लं— Hemachandra. The same termination in the form of इल exists in Marâṭhî. अपरिल therefore seems to mean "Western." कण्हहिनी must have been the name of something.

No. 22.

१. दासकस मुगुदसस सपरिवारस लेणं देयधमं.

This cave is the benefaction of Mugudâsa, a fisherman, and his family.

No. 24.

१. सिधं वरगहले[प?]तिस नेगमस लेणं[.]

२. देयधम कुटुंबिनिय चसनंदसिरिय ऊवरको दुञतु-

३. य चसपुरिसदताव ऊवरको एवं[.] लेणं चतुगत-

४. नियुतं[.] भिखुसंघस चातुदिसस णियाचितं

To the Perfect One. [This] cave is the benefaction of the merchant Varagahapati, [one] apartment, of his wife the worthy Nandaśrî, [another] apartment, of his daughter the worthy Purushadattâ. The cave thus composed of four parts is dedicated to the mendicant priesthood of the four quarters.

Line 2. चस may perhaps be traced to श्रस्था, or if read as वस, to वासू.

Line 3. चतुगतनियुत. गत probably from गर्त "a hollow," "a cave."

Remarks.

As I have observed before, the cave numbered 26 by Mr. West was constructed and assigned to Buddhist mendicants of the Bhadrâyanîya school by Gautamî, who is distinctly mentioned as the mother of the King Gautamîputra Sâtakarṇi, whose exploits are described

in the inscription. Gautamîputra therefore was so called because he was the son of Gautamî, while his own proper name was Sâtakarṇi. Puḍumâyi is called Vâsiṭhî-puta or Vâsishṭhî-putra for the same reason. Vâsishṭhî, as I have pointed out, granted the field conveyed in the second charter in Inscription No. 25. She is there spoken of as the Queen of Gautamîputra, if we accept the interpretation given in the note; and even if we follow that adopted in the text, and understand them as issuing orders conjointly, there could be no reason why their names should be so coupled together unless that relation existed between them. Puḍumâyi therefore was the son of Gautamîputra, and not his father, as the late Dr. Bhau Daji thought.[1] Gautamî is described as the mother of a king and grandmother of a king, while Vâsishṭhî is mentioned simply as the mother of a king. Gautamî therefore appears to be the more elderly of the two, which she could not be if her son were the son of Puḍumâyi, whose mother was Vâsishṭhî.

No. 26 is dated in the year 19 of Puḍumâyi, when Gautamî, who is spoken of as dedicating the cave in the present tense, must have been alive. Her son Gautamîputra Sâtakarṇi issued the charter No. 25 (first part) the next year, and is represented in No. 26 and No. 26A as having granted a village in the same year for the support of the inmates of the cave-monastery of his mother, though his name does not expressly occur. He must, therefore, have been alive when the cave was dedicated. As noticed above, Gautamî is spoken of as the mother of the Great King and the grandmother of the Great King. There is no object in such a statement, unless the son and grandson were kings at the time when the statement was made. How could Puḍumâyi then come to be king during Gautamîputra's lifetime? Instances are not wanting in Indian history of sovereigns appointing their sons as governors or kings of distant provinces. Aśoka was King of Kashmere during the lifetime of his father, and Agnimitra, of Vidiśâ while Pushpamitra reigned at Pâṭaliputra. In the same manner, Puḍumâyi seems to have ruled over this side of the country, since the inscriptions containing dates at Nâsik and Kârleṇ are dated from the commencement of his reign, while his father Gautamîputra Sâtakarṇi reigned at his own capital. Gautamî-

[1] Journ. B.B.R.A.S. vol. viii. p. 237.

putra Śrî Yajna Śâtakarṇi was one of their successors, whose name occurs in these inscriptions. The elder Gautamîputra is mentioned in No. 26 as having "established the glory of the Śâtavâhana race;" whence it appears that the dynasty called Ândhrabhṛitya in the Purâṇas was known by the name of Śâtavâhana.

Gautamîputra is spoken of in Nos. 25 and 26A. as "the Lord of Dhanakaṭa, or Dhanakaṭaka." Hwen Thsang mentions a country of the name of Tonakietsekia, which name is properly considered as the Chinese representative of Dhanakaṭaka. This, General Cunningham identifies with the ancient Dharaṇikot, situated on the river Kṛishna, in the Guntûr district of the Madras Presidency. From the bearings given by the Chinese traveller, it does appear that Dhanakaṭaka is to be looked for somewhere in that part of the country. That Gautamîputra's Dhanakaṭaka was the same as or situated near Dharaṇikot is confirmed by the fact that coins of the Śâtavâhana dynasty are found in that district. These being leaden coins, the place where they are found may very reasonably be regarded as that of their original circulation. Some of these are figured by Sir Walter Elliot in plate xi. attached to his article in the Madras Literary Journal, vol. iii. new series. Of these, one (No. 96) has for its legend *sata Kaṇisa ranno*, another (No. 101) has *Gotamiputasa*, and a third (No. 105) *Ranno Gotamiputasa sariyanna-satakaṇisa*.[1] The legend on a fourth (No. 100) may be read *Puṭumavisa*, though I am somewhat doubtful. The Purânic name of the dynasty also indicates that its original seat, or the province over which its kings immediately ruled, must have been somewhere in the Ândhra or Tailanga country. At first, the princes of the family must have been subject to the paramount sovereigns of Pâṭaliputra, and were hence called *bhṛityas* or servants of those sovereigns; and afterwards they raised themselves to supreme power.

The three princes named above are not the only ones of this dynasty that are named in the inscriptions. There is another of the name of Kṛishṇarâja spoken of in No. 6 as belonging to the

[1] General Cunningham reads this as *Rajuya Gotamiputa Satakanisa*, but I observe the letters *sari* after Gotamiputasa distinctly, and others further on which look like *yanna*. He reads the legend on No. 100 as *Pudumâvisa*, and does not give that on No. 101, but I have little doubt it is *Gotamiputasa*. (See Anc. Geogr. of India p. 541.)

race of Sâtavâhana. The characters in this inscription are far older than those in Nos. 25 and 26. The *va*, consisting of a circle with a vertical stroke above, is very much unlike the isosceles triangle of these latter, and this letter and the *da*, made up of a small rectangle with the left-hand side wanting and with two vertical strokes upwards and downwards, as well as the general style, look more like those of Aśoka inscriptions than those of these later ones do. This in itself shows that a considerable interval of time must have elapsed between Kṛishṇarâja and Gautamîputra. And this is confirmed by the Purâṇas, which, though there is not so much agreement amongst them as might be desirable, in the case of this dynasty, place about nineteen kings between Kṛishṇarâja, who stands second in the list, and Gautamîputra.[1] There are two other circumstances that deserve remark. In the time of Kṛishṇarâja the capital of the province seems to have been Nâsik (Nâsika), for his officer or general resided there, as we gather from No. 6, while in Gautamîputra's time it was Govardhana. There is still a village near Nâsik of the name of Govardhana, as I have observed before. The other circumstance is that while out of the five kings, beginning with Gautamîputra, the names of three occur in the cave inscriptions on this side of India, not one out of the nineteen successors of Kṛishṇarâja is mentioned. This would tend to show that the Sâtavâhanas possessed these provinces in the time of Kṛishṇarâja, but that some time after him they were deprived of them by another race of kings, who must have held them till Gautamîputra regained them and re-established the power of his dynasty. And in No. 26 he is mentioned as having exterminated the race of Khagârâta and "established the glory" of his race. The dynasty of Khagârâta therefore must have ruled over these provinces during the interval. But what other indications have we of the existence of this dynasty? In the first place we have the inscriptions of Ushavadâta, which mention a king of the name of Kshaharâta Nahapâna, who is also called Kshatrapa or Satrap. Kshaharâta looks very much like Khagârâta, and the characters in these inscriptions occupy a middling position between those of No. 6 and No. 26. Kshaharâta Nahapâna therefore may well have been the founder of the dynasty which displaced the Sâtavâhanas some

[1] See Wilson's Vishṇu Purâṇa, chap. xxiv. book iv.

time after Kṛishṇarâja. And coins of a race of kings calling themselves *Kings* and *Kshatrapas* or *Satraps* have been found in Gujarat and elsewhere, and amongst them one of Nahapâna himself. There are two inscriptions also in Gujarat, which mention some of these kings. Very likely therefore it was this dynasty that Gautamîputra displaced.

A passing examination of the coins of the Sâtavâhana dynasty mentioned above points to the same conclusion. If we look at the figures of the coins bearing the devices of a horse, four wheels, and a pyramid composed of arcs of circles with a wavy line below and a crescent on the top, we shall find that these are alternative emblems. Some of the coins have the first and the second, others the first and the third, and the rest the second and the third. The first two occur on No. 96 and No. 92, the former of which bears the legend *Satakaṇisa Ranno*. This was the name of one of the earlier kings of the dynasty. Of the coins which bear the third emblem, those which have a legend at all contain the names of Gautamîputra and his successor. Now this third device is universally seen on the reverse of Sâh coins; it does not occur on a Sâtavâhana coin of a king earlier than Gautamîputra, while it does occur on his and on those of his successors. This would show that the device was borrowed from the Sâhs, and was perhaps used by the Sâtavâhanas to indicate their conquest of them. And since it occurs first on Gautamîputra's coin, it must have been he who overthrew them. An examination of more coins of this dynasty, if available, would throw further light on this subject. But so far as my present information goes, the fact tends to confirm what we have gathered from other sources, viz. that Gautamîputra put an end to the Sâh dynasty.

These inferences would be rendered highly probable, or almost certain, if what is known or believed with regard to the dates of these kings were made to harmonize with the similar information we have with regard to the dates of Kṛishṇarâja and Gautamîputra. The coins of the Satrap or Sâh dynasty bear dates, but it is not known to what era they are to be referred. For the dates of the Sâtavâhana kings the only authorities are the Purâṇas. Though there is no very satisfactory agreement amongst them as to the names and number of the individuals composing the dynasty,

the period of its total duration, given by all, nearly corresponds. Starting from the date of Chandragupta Maurya, which is generally believed to be 315 B.C., and deducting 294, the number[1] of years for which the intervening dynasties reigned, we have 21 B.C. as the date of the foundation of the Ândhrabhṛitya dynasty; and going on further in the same way we have 2 A.D. for Kṛishṇa-râja's accession; and 319 A.D. for that of Gautamîputra. Now if we take Nahapâna to be the founder of the Śaka era, and refer all the Sâh dates to that era, the information got from the caves and the inferences based on it are perfectly consistent with these dates. Nahapâna's career of conquest must have ended in A.D. 78, when the era began; and this agrees with what we have stated above that the Sâtavâhanas were deprived of the province of Nâsik some time after Kṛishṇarâja. In the same manner, if the statement that Gautamîputra exterminated the race of Khagârâta is true, the last of the Sâh dates must come up near enough to 340 A.D., that being the date of Gautamîputra's death, or of the end of his reign. This last date, if the era is Śaka, is, according to Mr. Fergusson,[2] 376 A.D., in which case it would not agree with the other, but there is a mistake here. Mr. Justice Newton, whom he follows, assigns 235[3] A.D. to Svâmî Rudra Sâh, the 25th in his list, on the supposition that the era is Vikrama's, whence it appears that he reads the figure on the coin of that monarch as 291. But if we turn to the copies of the figures given by him at page 28, vol. vii. Journ. B.B.R.A.S., we shall find that there must be some mistake as to the right-hand stroke on the mark for a hundred in the last of the three dates given under Svâmî Rudra Sâh. For the first of these is 224, the middle figure being the mark for 20, since the circle has one diameter;[4] and the second 192, the mark for a hundred having no side stroke. It is impossible then that the king, whose date is 192, should be reigning in 291. It is extremely probable that this king, No. 18 in Mr. Newton's first list (Journ. B.B.R.A.S. vol. vii.) or No. 25 in his second (vol. ix.), whose date appears thus to have been misread, or improperly engraved, is the same

[1] Wilson's Vishṇu Purâṇa, chap. xxiv. book iv.

[2] Journ. R.A.S. vol. iv. new series.

[3] Journ. B.B.R.A.S. vol. ix. p. 18.

[4] See the numerals in the Nâsik Cave Inscriptions and my paper p. 67, vol. x. Journ. B.B.R.A.S.

person as No. 12 in the former or No. 19 in the latter. For the name of the individual and of the father is the same in both cases. There is only the prefix *svâmi*, "lord," in the former, which makes no difference, and the date 192 in the one case and 197 in the other. The final date of the Sâhs therefore is that of No. 17 (p. 28, vol. vii. B.B.R.A.S.), which is 250, for the figure resembling the letter *sa* stands really for 50, as I have shown in my paper[1] on the Valabhî dates. This date in the era of the Śaka kings is 328. About that time then, *i.e.* about nine years after his accession, the Sâhs must have been conquered by Gautamîputra. If, on the contrary, we should take the era to be Vikrama's, Nahapâna's date would be about 60 B.C., *i.e.* he reigned 62 years before Kṛishṇa-râja; which, it will be seen, does not agree with the evidence of the caves, the Sâtavâhana dynasty having been in possession of Nâsik in A.D. 2. In the same manner, the final date, which, according to Mr. Newton and Mr. Fergusson, is 235 A.D. on the hypothesis that the era is Vikrama's, but which really should be 196 A.D. in conformity with my reading of the dates, is so remote from Gautamîputra's 319 A.D., that he can in no sense be said to have exterminated the "race of Khagârâta." The Vikrama era will therefore not do. The objection brought by Mr. Fergusson against the Śaka is that if the dates were referred to it, the Sâhs would overlap the Guptas by a considerable period. But this period has now been reduced to about ten years, the Guptas being supposed to have come into power in 319 A.D. And a difference of ten years in the uncertain condition of our chronology is almost nothing. Besides, there is nothing to show that the Guptas obtained possession of the countries over which the Sâhs ruled in 319, or immediately after. Thus the date 319–340 A.D. for Gautamîputra, and the Śaka era for the Sâh dates, alone appear to be consistent with what we find in the cave inscriptions about that monarch and the Sâtavâhana dynasty. The dates in Ushavadâta's inscriptions therefore, viz. 42, 41, and 40, would be 120, 119, and 118 A.D. respectively.

The other inscriptions show that in the early centuries of the Christian era Buddhism was flourishing in this part of India. Mendicant priests from all quarters assembled at Triraśmi during the rains, and held what is called their *vass*; and laymen made presents to

[1] B.B.R.A.S. vol. x. p. 72.

them, especially of garments, during the robing month. For this purpose it was usual for persons who possessed the means, to deposit sums of money out of the interest of which the garments were given. The followers of Buddhism appear to have belonged principally to the artisan and labouring classes. Brahmanism was not in a condition of decline. Ushavadâta made as many presents to Brahmans as to the Buddhists; and in these Buddhistic cave inscriptions they are spoken of with reverence. Gautamîputra also takes pride in calling himself the protector of Brahmans, and credit is given to him for averting the confusion of castes, *i.e.* destroying the effects of foreign inroads on Brahmanism and the system of castes and re-establishing them.

Inscription No. 15 is dated in the ninth year of a king named Vîrasensa, who is called an Âbhîra or cowherd. The Purâṇas place a dynasty of that name after the Ândhrabhṛityas, and it was one of the many that ruled over the country, contemporaneously it would appear. They must have come into power after 416 A.D., and, according to the Vâyu Purâṇa, ruled for 67 years. The Âbhîras do not seem to have been very powerful kings, and possessed only this part of the country. The traditions about a *Gaulî rájya* current in the Nâsik and Khândeś districts not unlikely refer to them.

THE ETHNOLOGICAL SECTION.

ADDRESS

BY

PROFESSOR RICHARD OWEN, C.B., PRESIDENT.

WITH diffidence and misgiving I have yielded to the wish of our President, my esteemed friend and colleague, Dr. Birch, to undertake the honourable and responsible office of President of the Ethnological Section of the Congress of Orientalists, now assembled in London. These feelings naturally arise from consciousness of the slight relation of my habitual studies to the immediate objects of the present distinguished Assembly. Some results of ethnological observations in Egypt, submitted this year to the Anthropological Institute, and previous reports to the British Association, on lower, probably older, more Eastern races, form the narrow ground for a claim to be regarded as a fellow labourer in the work which so many more eminent ethnologists have here met together to promote. But if my help in your great aim be small, my grateful sense of the value of your consideration, and more especially of your teachings, is deep and genuine.

In presence of the distinguished founder of this Congress, Professor Léon de Rosny, I am at once reminded of the vast debt which physical ethnology owes to the bold yet true views originating in

French intellect and on French ground, whereby first was broken down the barrier that had arrested our estimate and conception of past time in connexion with the existence of the human race and the origin of its varieties. The name of Boucher de Perthes is wedded imperishably with this discovery; and that of the late estimable and indefatigable Ed. Lartet is closely associated therewith, through his confirmation and expansion of the insight of the philosopher of Abbeville into the true meaning of the geological and palæontological phenomena of his neighbourhood. Worthy successors have these great names found in living French ethnologists, of whom De Quatrefages and Paul Broca may be cited as types. To acknowledge the value of the labours, researches, genius of the philologists of Germany would be too hard for me were I to aim at adequacy. Ethnologists feel their indebtedness thereto at almost every doubtful point in the track of inquiry, more especially when it leads eastward. I am happy to believe that no country has more willingly discounted the German claims for such indebtedness than England, or has with more pleasure made a home welcome and acceptable to the distinguished linguistic philosophers who may honour another than the Fatherland, as a notable one has done this island, in choosing it for a continuous residence and field of research and instruction. But there is a mighty Empire to the east of Germany, whose services to ethnological science are perhaps less known and appreciated in England. Every conquest in the heart of Asia by Russian valour, endurance, and military skill has also borne its scientific fruit, has been attended by the peaceful victories of ethnology; more especially as regards the linguistic evidences which lie at the foundation of the dark problems of beginnings and affinities of races. A vocabulary or grammar of some Finnish or other dialect speedily follows the track of the invading force. Some score of established varieties of speech budding out of Finnish roots have been the fruit of painstaking researches of a people in whom the faculty of easy acquisition of foreign languages seems innate. The philological works of a Castrèn, Sjögren, Scheffren, Wiedemann, Middendorf, crown those names with honour; their contributions enrich almost each successive volume of the *Transactions of the Imperial Academy of Sciences of Petersburg*—a mine of wealth which amply rewards the exploration of the ethnological student. One wishes that such a scientific staff

could have followed the track of our victorious troops in Abyssinia and Ashantee, and the example of Russia we may hope to be followed in future manifestations of the power of Great Britain among remote, primitive, and little known races of mankind. That example has been followed—rather, I should say, anticipated—by distinguished scholars, warriors, administrators in our great Indian Empire. The contributions to ethnology which enrich the *Journal of the Royal Asiatic Society* amply attest the sympathy of the rulers of India with the aims of science. The like testimony will be found in the valuable and original memoirs published by cognate associations in the capital cities of India. To the present centralized administration of India, ethnology is indebted for the issue of descriptions and photographs of the various races, castes and outcasts, traders, labourers, soldiers, outlaws, etc., natives of the vast territories of that mighty conquest. It is known to ethnologists, and partly explicable by the physiologist, that the portrait artist cannot perfectly succeed with the face of a race different from his own race. In the most finished and costly illustrations of voyages and travels by European experts, with aid from Governments, the portraits of aborigines proclaim almost as well as the title-page the nation of the artist. A Papuan, *e.g.*, will have a French, German, or English cast of physiognomy, according as he has sat to a limner of one or other country. Formerly honoured by conversing on this matter with the Prince Consort, His Royal Highness was pleased to show me a collection of ethnological photographs, which, at his instance, and for that reason, had been made for him by officers capable of practising the wonderful art in remote lands. A like encouragement has been held out to the accomplished officers of the Indian Service, and already the result rises to five 4to. volumes (1872) on *The People of India*, edited by J. Forbes Watson, M.D., and John William Kay, K.C.S.I., F.R.S., with instructive notices of the subjects of the photographs. This great work and priceless contribution to Eastern ethnology has been brought out in its present elegant form at the India Office, under the auspices of the late Minister for India, his Grace the Duke of Argyll, with whose name may be associated, as a recipient of the acknowledgments of ethnologists, that of the late Secretary for India, my colleague in this Congress, and esteemed friend, the President of the Archæological Section.

Of home ethnologists, more especially those who have brought to bear linguistic attainments upon man's ancient history, I need not allude to the eminent ones who share with us our present work, but I may be permitted to name Robert Gordon Latham, F.R.S. The noble edition of our classical English Dictionary places the name of its author alongside the imperishable one of Samuel Johnson; but Latham's original works give him a distinct and lasting pedestal of fame as an elucidator of the affinities of human races, and as a guide in the scientific teaching of our language. May we recognize it as a tribute to British contributions to ethnology that London has been honoured this year by the presence of the most distinguished Continental labourers in this field of science? For myself, as an archæologist, I belong to that other species defined by my master in palæontology, the immortal Cuvier, "*antiquaire d'une nouvelle espèce*;" and my habitual researches relate to periods transcending those expressed by the terms of historical estimates of past time. In that relation mainly stand the few studies I have been able to devote to the proper subjects of the present Section, and perhaps the sole service I may render to the Congress is to exemplify hindrances to the progress of geology, which possibly may still tend to divert from its true course the science of Oriental races and families of mankind.

The Papuans of New Guinea, with cognate dark-skinned, broad-nosed, prognathic peoples of Australia, New Hebrides, New Caledonia, and neighbouring islands, bespeak by affinities of their rude dialects, as well as by physical characters, a low and early race of mankind, which, in some respects indicating kinship with the Bushmen of South Africa, are yet sufficiently distinct to suggest a long term of existence in another and distant continent. Zoological and geological evidences concur, as in a degree exemplified in *Wallace's 'Malay Archipelago,'* to point to a prehistoric race of mankind, existing generation after generation on a continent which, in course of gradual, non-cataclysmal, geological change, has been broken up into insular patches of land: there such race is still open to ethnological study. Wending westward to regain the proper field of our Congress, we have evidences of an early—if I say "primitive" it is because we know none earlier—bipeds, in the trans-Gangetic peninsula and Indonesian Archipelago. These Nigritos, in India, have fled before

invaders from the sub-Himalayan range, represented by Burmese and Siamese; before invaders from the south, the Malays, with their maritime advance in civilization; before later immigrations from the north, with the religion and literature respectively of the Aryan Hindoos and the Arab Mussulmans. Fragments of the dwarf Nigrito stratum may be picked up—a scanty one in Engomho, the largest island off Sumatra, in the Mergui Archipelago, another in the Nicobar Isles, a third in the Andamans. The Nigritos who have survived such changes, and have been caught, so to speak, upon a new continent, as in Hindostan, have preserved themselves in mountain fastnesses and forests, have fled before later immigrants, have never assimilated therewith, have always been looked upon by them as prior in time, and now are verging towards extinction. In speculating, therefore, on the place of origin of Mincopies and Hill-tribes, I would impress upon ethnologists to set aside ideas of the actual or present disposition of land and sea as being necessarily related thereto, and to associate with the beginning of such low forms of humanity a lapse of time in harmony with the latest geological changes of the earth's surface. In such observations (*e.g.*, as the estimable voyager Wallace uses, when he remarks on the high probability that the "Nigritos of Bengal have had an Asiatic rather than a Polynesian origin"—*op. cit.* vol. ii. p. 424), no facts supporting the assumption of such degree of probability have come to my knowledge. From such as have come, I infer that the birth-land of the Mincopies, *e.g.*, was neither Asiatic nor Polynesian as these terms are understood in modern geography. A contributor to the *Transactions of the Asiatic Society of Bengal* writes:—"Some may be of African origin or of mixed African descent; their woolly hair and other signs apparently afford such a solution" (Mr. Day, F.Z.S., *Observations on the Andamanese*, June, 1870, p. 153). The question of the African origin I have sounded in my *Report on the Psychical and Physical Characters of the Mincopies*, in *Reports of the British Association*, 1861. As to the hypothesis that "the Mincopies and Australians are not a pure race, but hybrids between true negroes and a Malayan or yellow race" (Quatrefages, *Unité de l'Espèce Humaine*, 12mo., 1861, p. 173), I will only repeat my remark—"the cardinal defect of speculators on the origin of the human species seems to me to be the assumption that the present geographical condition of the earth's

surface preceded or co-existed with the origin of such species" (*Reports of British Association*, 1861, p. 8).

The Andamanese, or Mincopies, of whom I exhibit photographs, suggest the same relation to geological change of surface as the Papuans. Their islands are in the Bay of Bengal, but so much as may be deduced from their poor unsettled language shows relationship with the Môn or Peguan dialects rather than with the continental Burmese living on the coast nearest the Andamans. *Sus andamanensis* and some "Bats" are the sole known mammals, besides the Mincopies, which may be called indigenous to the islands. A Tupaia is suspected to still exist in the woods; but how many species may have been extirpated by the unceasing chase of hungry Mincopies, Zoology may never know; unless some cavern, with bones and teeth in its breccia or sediments, affords materials to the palæontologist. I infer that the now island homes of the Mincopie race were above water before the nearest continent assumed its present size and shape. The fossils of giraffes and hippopotamuses in Newer Tertiary deposits on slopes high up the Himalayas significantly point to the (geologically) recent elevation of that grand mountain chain, and therewith probably to the movements resulting in the present configuration of the southern Asiatic land.

Notwithstanding their proximity to the mainland and to the course of Indian traffic, the Mincopies maintained themselves until the needs of the Mutiny war led to one of their islands becoming a penal settlement, apart from higher races of mankind. These races had till then failed, as they still fail with the Papuans of New Guinea, to get a footing and begin the work of elevation of the aboriginal race. This arises from the unmitigated, uncompromising hostility, by force and fraud, to any invaders, accidental or intentional, whom the aborigines had it in their power to extirpate. Such hostility, hatred, and dread can only be compared with that which the brute species in a state of nature entertain towards man. An island of *Quadrumana* would conduct themselves, to the extent of their destructive and repellent faculties, in like fashion towards biped immigrants. The Mincopies, like the Papuans, seem to realize instinctively their fate through contact with a higher race, by which, however benevolent the intention, such fate would be to be improved, like the Tasmanians, off the face of their native land. Our country-

men, since the occupancy of one of the islands, have done their utmost to raise and civilize the natives. Young female Mincopies have been taken in hand by kindly-disposed ladies, have been dressed and trained as English girls. Some of the scholars tried to get back to the larger island by swimming. Of those retained to the time of puberty and then returned to their tribe, all threw off their European clothes and reverted to the simple pudendal leaf, and they showed no sense of shame before their teachers. The cincture of the males—three or more girths of a strong flexile tendril wound round the abdomen—leaves the generative organs conspicuous, as in the photographs; and of such nakedness they have a prelapsarian, or, speaking zoologically, quadrumanous, unconsciousness. Of ideas of another life they afford glimpses. The widow dreams of her dead husband; to the widower, in his slumber, returns his departed wife: the pangs of hunger and the thoughts of successful chase excite the vision, in which a deceased notable hunter or fisher revisits the dreamer, and an unusual haul of fish or capture of game is the result. This seems to be the foundation of the Mincopies' faith in a future life of successful chase and cessation of hunger pangs. The widow carries about with her till re-married the skull of her deceased spouse. The Australian widow is more practical, and converts his cranium into a drinking vessel. I cannot obtain from friendly residents, through whom I receive materials for studying the Mincopies, any fact or evidence of an "inherent impulse moving them to turn their thoughts and questionings towards the sources of natural phenomena." Such impulse may arise after primeval man has made the requisite advance. But the subjects of Oriental ethnology, represented in the photographs exhibited, stand on a lower step, and even these may be primeval only in the sense that we have not yet got evidence of still inferior bipeds.

There is, of course, another hypothesis which may commend itself to a few of my hearers, as it does to a large proportion of the reading classes of this country. It is that which, in the terms of the Venerable Archdeacon Squire, would affirm that the Andaman Islands, like Egypt, were "colonized about 130 years after the Flood by emigrant Asiatics, descendants of Ham or Cham, the son of Noah." Such hypothesis the Archdeacon rests upon "the Scriptural account of the general destruction of the world by the Deluge, which all

Christians admit, or, at least, ought to admit" (Preface to the Translation of *Plutarch* "De Iside et Osiride," p. v.). Fain would I have found facts to square with this conscience-enforcing principle, and hard was the struggle against the prepossessions of sacerdotal education in being brought, by the course of daily duty, face to face with phenomena subversive of the idea of the distribution of mankind from the plain of Shinar at the Biblical date of the building of Babel. The evidences of the antiquity of man in Europe, discovered, with a glimpse of their significance, by Tournol and Christol, in 1826; by Schmerling, with more insistence of their meaning, in 1833; rightly discerned and persistently advocated by Boucher de Perthes in 1838; finally confirmed by Prof. Prestwich, of Oxford, have multiplied to demonstration. I will only remark that the shell mounds of the Andaman Islands exemplify the grade and mode of existence of stone-weaponed humanity at this day, identical with that of the accumulators of "kitching middens" in the North of Europe in pre-historic times.

My latest ethnological observations relate to the race that founded the civilization of ancient Egypt. Permit me briefly to premise evidence of the antiquity of the subjects on which those observations were made. The want of this preliminary has vitiated studies akin to my own, and far superior to them in extent and devotion of research. As an example I may refer to the vast body of illustrations of the craniology of mummified Egyptians, with which the honoured name of Morton is associated. The subjects of his conscientious and accurate observations had been gathered in the great graveyards and labyrinthic sepulchres of Egypt, but of their relation to any given reign or dynasty there is little or no evidence—none certainly that can be called trustworthy in regard to the first six dynasties. The skulls figured in Morton's great work are of ancient Egyptians it is true, but of such as may have died at any period of a range over some 4000 years.

My studies are not merely of skulls, but of them clothed with flesh; not of their dead remains only, but I may say of the living men and women contemporary with Kings of the Third, Fourth, and Fifth Dynasties. Portrait sculpture had advanced to such perfection at that remote period, that each individual of the upwards of fifty statues, from the sculpture closets of family tombs, has its

distinct individual physiognomical character, and would be worthy of the study of a Lavater; they unquestionably impressed me with the conviction of their faithful likeness to the individuals named. Associated inscriptions in the tombs yielding these precious ethnological evidences give the reigns of the Phras under whom the individuals lived and died. It remains to determine the period of such reigns and the relation of such period to the comparatively small amount of the history of ancient Egypt that can be paralleled with inductively determined periods of the contemporary history of other nations.

No documents are more important in ethnology, or the scientific history of races, than those which we owe to the most philosophic and knowledge-loving of the Pharaohs of the Greek dynasty,—the records, namely, written and preserved by the hereditary priesthood of Egypt and of Judæa respectively. Through *Ptolemy Philadelphus* these first, by the Greek translations he caused to be made, became the property of the human intellect. In the evidences and beliefs of the respective antiquities of these people so recorded, there then was seen to be great discrepancy. Egypt had risen from a long, misty, mythical period to a kingdom ruled and administered by one mortal Phra or Pharaoh, at a period of time, according to Manetho, contemporaneous with the creation of the world according to Esdras. A later Phra (Koufou-Cheops) was building his pyramid, according to the Egyptian chronicle, when the whole world was under the waters of a universal Deluge according to the Hebrew chronicle. What ought to be the attitude of the ethnologist before the Manethonian and the Septuagintal documents? As an investigator of the relative dates, periods, nature, and causes of the changes in the crust of our globe, and of the organisms which have worked the vital form of force thereon, I must answer, to cast away all partiality to the respective authorships of those documents, all assumption or presumption of the superior claims to recognition of the origin of the one or of the other, to test them by facts which are open to discovery, and on which the truth-getting faculty of man can found scientific conclusions. The ethnologist can no otherwise attain to durable results.

In regard to the Hebrew document this test has been comparatively recently applied by the Organization or Society, in the initiation of which I gladly took part, known as the "Palestine Exploration

Fund," and the results already obtained have been most acceptable to Biblical scholars. A like investigation of the remains of edifices, works of arts, monumental records, akin to that on the "Moabite stone," has been carried on in Egypt for a longer period and with richer results. Gladly, and feeling it a high privilege, do I avail myself of this opportunity to express my homage of gratitude to Lepsius, my deep sense of the inestimable value of his services devoted to Egyptology, in trying travel, with risks to life and health, guided by the highest linguistic attainments, especially of the hieroglyphic characters, and by the rare gift, instinctive as it seems, of the discoverer, in the discernment of signs of light not caught by the eyes of ordinary travellers. And most ungrateful should I be if I did not, at the same time, acknowledge my deep indebtedness for such ethnological fruits as I may have gathered in my own travels and sojournings in Egypt to the worthy successor of Lepsius in the researches most essential to our estimate of Manetho's lists—I allude to Auguste Mariette Bey, the present Director of the Service of Conservation of the Antiquities of Egypt; the founder, arranger, curator, and expositor of the Museum of Antiquities in the possibly Petrine Babylon, now a suburb of Cairo. From the specimens with which he has enriched that museum were the photographs taken which I now exhibit.

Believing that the succession of Kings and Dynasties could in a great degree, and will in a fuller one, be worked out on evidence of Egyptian antiquities, yet the periods or durations of reigns rest mainly on the Manethonian lists. Were the records yielding such lists true? The following have afforded the most instructive tests and answers to the question. 1st, the Turin Papyrus, or list of rulers of Egypt from the Mythical period to the Nineteenth Dynasty; 2ndly, the Karnak Tablet or fresco of Thotmes III., now in Paris; 3rdly, the like monument of Rameses II., from Abydos, in the British Museum; 4thly, and above all, the mortuary inscription from the tomb of the priest Tounar-i, now in the Museum of Boulak.

To these add the names of Kings on sepulchral tablets and scarabs of contemporary priests, generals, officials, etc. So tested, verified and supplemented, the Summary of the Sebbenytic Priest, as known

to us by the citations of adverse critics, errs, as might be anticipated, on the side of omission, not on that of alleged purposely deceptive additions and exaggerations of reigns.

Such help as can be gleaned from the fragments of the first, in testing the transcribed record of Manetho, confirms it. The second has contributed to determine the names of the kings of the Thirteenth Dynasty, again, in the main, in accordance with Manetho, not contradictory. The third document yields sure grounds for the classification of Kings of the Eighteenth Dynasty, and served, under the sagacious study of Lepsius, to determine the place in Egyptian history of the classical Sesostris—the Sesortasen or Osirtasen of the grand Twelfth Dynasty of the middle Empire. In their results, so far as they can be applied to test its accuracy, the summary of the sacred chronicles of Egypt comes out as veridical in the main. The most regrettable deficiency in the "Table of Abydos" in the British Museum is the commencement of the series of defunct ancestral Phras to whom Ramses pays homage; for what testimony more conclusive of the genuineness of the lists of kings and reigns preserved in the priestly archives could be adduced than that the names of such kings and the numbers of dynasties, reigning, according to those archives, from 5000 years to 4000 years B.C., and quoted by the Royally-entrusted Priest 300 years B.C., should tally with the lists recorded by a priest who died in the reign of a Rameses 1400 years B.C.? It is truly marvellous, and of priceless value to the Egyptologist, that such records should have been handed down, faithfully chronicled and safely kept, through 4500 years of vicissitudes, changes of dynasties, usurpations, wars, invasions, destructions, and partial conquests of the land of Egypt.

May I trespass with a few words on the monument from Sakkara, which, with the Statue of Cephren, is of itself worthy of a visit to Cairo? The epitaph or mortuary inscription discovered by Mariette in the tomb of the High Priest Tounar-i, who lived and died in the long reign of Rameses II., proclaims the defunct to be "justified" and privileged to enter that heavenly mansion to which defunct kings were admitted. Of this august assembly the Priest gives 55 names. No doubt these fall short of the number recorded by Manetho as succeeding each other between Menes and Ramses, but then Tounar-i saw only the "justified kings." Neither Thotmes nor Rameses ad-

mitted indiscriminately all their predecessors in their complimentary frescos. But the touchstone in the Sakkara tomb is this—it gives the names of two kings of the First Dynasty, of six kings of the Second, of eight kings of the Third. Those names occur in the Manethonian translation of the Book of Egyptian Kings, submitted to a monarch of the Thirty-third Dynasty. It is trite to comment upon the usage of Manetho's precious record by Jewish and early Christian writers. He was charged with making dynasties successive which had been contemporary, etc.; but this was imputed on no foundation of observed facts, simply on the assumption that a certain chronology, resting on no scientific basis, must be accepted as being a Divine revelation, and any statement opposed thereto must be put down or explained away. So a living professor of history, in reference to Syncellus's reduction of Manetho's chronicle to 3555 years before the conquest of Egypt by Alexander, remarks: "Even this view, however, seems to be extravagant, for it places the accession of Menes in the year B.C. 3883, which is considerably before the Deluge according to the highest computation" (Rev. Canon Rawlinson, *Translation of Herodotus*, vol. ii. note 2, at p. 1). The hieroglyphical characters, the then dead language, known and used solely by the learned Egyptian priesthood, were not understood by Josephus, Clemens Africanus, Tatianus, or George the Monk; they had access to the Chronicles of Egypt only through the translation by Manetho, every copy of which has perished. Eusebius in his 'Chronicon,' or 'Endeavour to synchronize the Hebrew with other histories, and reduce them to a regular series of Biblical Chronology,' seems to have known this "translation" only by the abstracts of Julius Africanus. But an historian of the present day has not this excuse for closing his eyes to the evidence of the monuments of a people who excelled all others in the pains they took to leave imperishable records of their annals. The hieroglyphic inscriptions they bear can now be read. Manetho stands before this testimony and waits judgment. If, for example, statues and laudatory memorials of the kings of a Memphite dynasty were found only in Lower Egypt, and those of kings of an Elephantine dynasty only in Upper Egypt, there would be ground for suspicion that the Egyptian Priest had aggrandized the rule of both series of limited monarchs, and had lengthened out their history by making certain dynasties successive which had, in fact, reigned contemporaneously. There were periods, indeed, when

Upper and Lower Egypt had respectively their own Pharaohs, but the normal relations of such were hostile. Manetho records such conditions of the Monarchy, and notes some of the Theban kings as contemporaries of the Shepherd Kings reigning at Tanis. But a Pharaoh of the lower country permitted not his usually hostile contemporary in the upper country to dedicate to himself monuments at Tanis; nor would a Theban king permit a Hycksos one to set up his abhorred image at Elephantine. The discovery, therefore, by Mariette of such monuments of one and the same Pharaoh or dynasty of Pharaohs, occurring the whole length of Egypt, from north to south, is a scientific fact testifying to the truth of the lists of the successive Kings recorded by the Egyptian priests. Testimonies by contemporary sculptors have proved, for example, the Sixth Dynasty, which chose for its capital Elephantine, to have succeeded the Fifth Dynasty, which chose for its place of business Memphis. They have similarly and satisfactorily demonstrated the Fourteenth Dynasty of Xois to have succeeded, in time, the Thirteenth Dynasty of Thebes. In sum, the study of these various testimonies, and especially of those later ones, which have tempted me to repeat three times my first visit with his Royal Highness the Prince of Wales to Egypt, has begot a conviction that the chronology I have the honour to exhibit (pointing to the Diagram) to the present Section best squares with the scientific evidence at present bearing upon it.

In illustration of the Egyptian people of the oldest Dynasties, I submit the following evidences: 1. A photograph of life-size statues of a Prince and Princess, relatives of the last King of the Third Dynasty, near whose pyramid at Meydoum was their sepulchre. The hieroglyphics have a certain simplicity, not to say rudeness, in accordance with this high antiquity. 2. I next submit the photograph of a life-size statue of Cephren, a Phra of the Fourth Dynasty, builder of the second Great Pyramid at Ghizeh. One cannot fail to be impressed with the individuality of this noble piece of sculpture. The King is seated on a simple but elegant throne, the whole carved out of one slab of the rare, beautiful, and most intractable mineral called diorite. The face, with European features, refined, intellectual, has a calm, dignified expression, free from the conventionality of the statues of later monarchs, the anatomy of the frame as true as in such work from the chisel of Michael Angelo (Plate III. Fig. 4). What was the period of incuba-

tion of Egyptian sculpture before reaching such perfection in both the creative and mechanical parts of the noblest of the arts? 3. This photograph is of a statue, in wood, one-third of the natural size, of a functionary of the Fourth Dynasty. Of this work of art Mariette justly remarks: "*Rien de plus frappant que cette image, en quelque chose vivante d'un personnage mort il y a six mille ans. La tête surtout est saissisant de vérité.*" 4. Photograph of a similar statue of a female, of the same period, of the same perfection of exècution. 5. A seated statue in granite of a priest of the Fifth Dynasty.

Not any of these physiognomies, if clothed in modern dress, would suggest that they were extra-European. The forehead is good in shape and size; the nose well-formed and proportioned, straight or slightly arched, with thin, not broad, but finely modelled alæ; mouth not more prominent than in the highest existing races; lips rather full in some, but in these less so than in the statues of the later Empire, and this feature may be matched in modern society.

And these are the people whom we were taught, as children, to believe to have been degraded blacks—descendants of Ham; and whom, as ethnologists, we have been lately bidden to regard as Australian by origin.[1] This view I have tested by evidences collected in Egypt, in a paper submitted to the Anthropological Institute,[2] and refer to it only by reason of its adoption, or quotation, by my esteemed friend, the President of our Turanian Section, in his Opening Address,[3] in which the inhabitants of Australia, the Hill-tribes of India, and the ancient Egyptians are referred, "on physical characters alone, without reference to language or history," to one and the same type or race, which Prof. Huxley terms "Australioids." Referring to that author's original memoir, the physical characters ascribed to the Egyptians are: "the dark skin, the black, silky, wavy hair, the long skull, the fleshy lips, and broadish alæ of the nose, which we know distinguished his remote ancestors" (*op. cit.* p. 405). The grounds of that "knowledge" are not given. The above physical characters are affirmed to cause those "remote ancestors" "to approach

[1] Huxley, "On the Geographical Distribution of the Chief Modifications of Mankind," *Journal of the Ethnological Society of London*, January, 1871.

[2] "Contributions to the Ethnology of Egypt," *Journal of the Anthropological Society*, vol. iv. 1874.

[3] *Academy*, September 26th, 1874, p. 350.

the Australian and the 'Dasya' more nearly than they do any other form of mankind" (*ib. ib.*); but it does not appear that any evidence whatever of the physical characters of those ancestors was in possession of the writer. I, therefore, submit to the Ethnological Section, a comparison based on observation of the "physical characters" of the Australians with those of the remotest ancestors of the Egyptians in which such characters have been noted.

In the frescos in which the African races are associated with ancient Egyptians and Syro-Aramæans, a blackish or dark chocolate brown tint distinguishes the dark-skinned races from the red ochreous tint of the Egyptian, and the tawny or yellowish skin of the Assyrian. In the statues of the individuals of the Third Dynasty the male is so tinted ochreous, while the female has a lighter colour. The racial character of skin-tint or complexion is significantly manifested by such evidences of the depth of colour due to individual exposure. The male wears only the "kilt"; the female has a sleeveless garment, suspended by shoulder-straps, and reaching to the ankles. The primitive race-tint may be more truly indicated by this Princess, who lived, according to Manetho and Mariette, 6000 years ago, than by that showing the effects of exposure in her scantily-clad husband. The squaw of the dark-skinned Australian, or the most favoured female of the harem of an Ashantee king, in whatever degree protected from the outer influences, shows as dark a hue as the king himself or his meanest slave.

In photographs of a living native of Australia which I communicated, with those of the sculptured features and lineaments of the body of the ancient Egyptians, to the Anthropological Institute,[1] the members who had accepted the "Australian hypothesis" were enabled to exercise the speculative faculty in accounting for the obliteration, in the ancient Egpytians, of such simial characters, in the Australian, as the depressed bridge and broadened alæ of the nose. And how the heavy beetled brow became reduced, and the depression it overhung in the Australian became filled up, in the Egyptian. The vertical line dropped from the nose-tip in the Australian touches the under-lip; the alveolar "prognathism" to which this is due has to be reduced, in the ascensive course from such hypothetical "remote ancestors," to Egyptian "orthognathism," which is as de-

[1] *op. cit.* June, 1874.

cided (as shown in the subjects of Plate II. and of Plate III. Fig. 1, of the Memoir above quoted) as in Europeans.

Materials for comparison of the hair in ancient Egyptians with that in their alleged progenitors are scanty. The wig in the British Museum negatives the negro woolly character as it does the Australioid "raven-blackness." It is glossy, of a brown or deep auburn colour. Whence, it may be asked, did the ancient Egyptians derive their habit of shaving or close-cropping the hair? If we are to seek it in and through some remote ancestral source, we must go to the Andaman Isles, instead of Australia, for shaven bipeds sufficiently low in the scale to fit the assumption of the grade of such source. But neither race of savages practise circumcision. Common sense, however, repudiates the notion of the necessity of inheritance in reference to the initiation, by the ancient Egyptians, of such practices.

Head-shaving and circumcision were operations performed by the ancient Egyptians in order to remove or diminish inconveniences due to climate. The cause of the conditions of climate being unknown, and the effects such as to suggest omnipotence in the Causer, the secondary results or influences upon the thinker might be held to be the mode of command to which he paid obedience by the practice of removing unessential troublesome parts of his body. There is no evidence, or indication, that the ancient Egyptians practised circumcision or shaving by direct supernatural injunction, or that they adopted the operations from a more ancient race so miraculously favoured. The evidence is ample that the Egyptians did practise both circumcision and abstinence from pork centuries before slave-labour was availed of and imported by a Thotmes or a Rameses.

In comparing the skull of an ancient Egyptian of the Fourth Dynasty with one of an Australian, the first differences are seen to be due to the better-developed brain in the former: acquisition of vertical mass at both the fore and the hind lobes of the cerebrum diminishes, in the Egyptian, the convexity of the upper curve of the cranium in profile, and gives the appearance, in that direction, of flatness, such as is seen in the profile of Ra-Hotep (pointing to a diagram from the photograph). The breadth of the cranium is relatively greater, and the sides of the hemispheres being developed both vertically and transversely, the upper curve in that

direction, in the cranium, resembles that shown in the photograph of the head of the same ancient Egyptian. In the Australian the want of this development causes the roof of the skull to slope from the mid-line, or "roof-tree," downwards and outwards; and the cranium, viewed from behind, presents a sub-pentagonal contour, with the angles rounded off: this character is not present in the skulls of the ancient Egyptians. The lower fore and hind lobes of the cerebrum in the Australian are associated with corresponding minor rise of those parts of the calvarium, and the upper curve, in profile, is more convex than in the old Egyptian skull compared. But in some individuals of the Fourth Dynasty the brain, retaining the same dimensions of length and breadth as in the subject of the statue of earlier date, has a better vertical development of the mid-lobes, and consequently the profile curve resembles that of the Australian, and this by reason of the still higher type of brain raising the vault of the larger skull in a corresponding direction. If a term of craniological art were invented to express the convex contour of the profile view of the calvarium, it might be predicated of both the Australian and the Egyptian; but it would deceive if used as evidence of unity of type or race. Similarly both skulls may be called "dolichocephalic," because the long diameter exceeds the cross one; but the absolute length of the cranium is greater in the Egyptian, and yet is relatively less, compared with the transverse diameter, than it is in the Australian; because the brain in that low race, though absolutely shorter, is relatively narrower, by reason of the want of lateral expansion of the hemispheres. It is thus more typically or eminently "dolichocephalic." The value of the argument for identity of race between the ancient Egyptian and the Australian, through predicating "dolichocephalism" in both, may thus be appreciated, the true conditions being explained.

With these nigritic differences are associated the more marked ones, of the tuberous cheek-bones, the thick super-orbital ridge made prominent by the sunken origin of the small flattened nasal bones. Such simial characters of the Australian being associated with strongly marked prognathism, and, above all in relation to questions of descent and affinity, with relatively larger crowns and more complex fangs of the molar teeth.[1] The skulls and dentition of the ancient Egyptians

[1] *Odontography*, p. 453, plates 118, 119. 4to. 1840.

are as distinct from those of Australians in the above characters as are those of the highest known races of mankind at the present day.

The sum of my observations and comparisons leads me to the recognition of a nearer affinity, in the oldest Egyptian skulls, to those of the handsomer races of Central Africans noted by Livingstone, than to those of any well-defined Asiatic, European, Negro or Nigritic race.

With our palæontological evidence of the antiquity of the human species, 7000 years seems but a brief period to be allotted to the earliest, the oldest known, civilized and governed community. That a race with the physiognomical characters here exhibited, and contrasted (pointing to the diagrams), should have risen so early to that high estate, along the Nile, accords with the unique blessedness of the soil and climate of Egypt, and with the high racial characters of the people flourishing under its antediluvian Pharaohs. This term, of course, is arbitrary, for Egyptian records tell nothing of a cataclysmal deluge. Geology demonstrates that, within the historical period and long anterior thereto, the land of Egypt traversed by the Nile was never visited by other than its annual, commonly beneficent, overflow. The deposits of that overflow, which a diluvial torrent would have swept out of the valley which the Nile has excavated, testify as strongly as do the volcanos of Auvergne and the cataract of Niagara against the operation of such geological dynamic at the Septuagintal[1] date or any earlier. The instructive layers of the fluviatile deposit, like the leaves of a grand old book, in part read by Horner and Hekekyan-Bey, have since been displayed throughout their extent by later engineering operations. They testify to as great a duration of time past for their successive deposition as the mythical period of Manetho, anterior to his historical one, would require. No hint is given in that dim glance into the past of any exodus from other lands into Egypt. The individual who first raised the conscience of the primitive people in the Nile Valley, and who suffered, as is usual with such, from the evil ones whose violence and rapine he rebuked, was an autochthon; and, as is the wont in the rise and progress of a so benefited human race, he became at a later period a divinity, a judge, Osiris. The

[1] Bishop Russell, the latest writer of eminence on Sacred Chronology, which is mainly that of Hales and Jackson based on the Septuagint, dates the 'Flood' at 5060 years from the present year, 1876.

deeds of the warrior Horus, similarly handed down and magnified, formed the basis of another Demigod; but he likewise is Egyptian—no sign or hint of being borrowed elsewhere. The cranial, facial, and other physical characters of those Egyptians who lived and died nearest to the period when Gods and Demigods ceased in the flesh to govern Egypt yield no evidence on which I can rest that they were a colony of Asiatics. Evidence is still needed—at least it is not yet forthcoming—to demonstrate the posteriority of Egyptian civilized man to any such advanced race in other lands. There are, doubtless, linguistic elements, as in that which recognizes the worth of woman,—her right to a vocal sign significant of sex,—evidencing affinity with tongues called "Semitic." But whether such affinity be due to migration from a hypothetical centre, Asiatic or European, whether to Egypt from any other land, or from Egypt to any other land, are problems which still wait for solution.

Permit me to trespass with the following remarks, which seem in some measure to bear upon this pregnant ethnological question. The Isthmus of Suez is geologically a recent bridge between Asia and Africa; it was completed at the newer Miocene period. Recent, however, as this period is in geology, it was sufficiently long ago to allow the forces originating species to establish such specific grade of distinction between large classes of animals dwelling respectively in the two seas which the Isthmus divides. No shell, no fish, for example, native of the Red Sea, is met with in the Mediterranean, and reciprocally. Only the zoological mind can conceive, or attempt to grasp, the lapse of historical time so indicated. It is amply sufficient for the rise of such a race as the photographs exemplify.

If Egyptian civilization sprang from an Asiatic colony, whether at Squire's date or an earlier period, the route by land must have been by the Isthmus. We have evidence that Asiatic immigrants did take that route to Egypt, and, subduing the northern autochthones, established themselves in the delta, and there founded their capital Tanis (Sân=Zoan), in the delta, in a position eastward of the Bubastic branch, strategically chosen as against succeeding immigrants and invaders. Here is a condition which throws some light upon the question, and more directly, I think, than the linguistic evidence. The proved immigrants were Syro-Aramæans, perhaps migratory shepherd sheiks, typified by Lot and Abram, with their fighting

followers, or, it may be, of more northern origin. They came in, at or after the Fourteenth Dynasty, about 2500 years after Menes.

Where were the capitals of the ancient Pharaohs? The earliest one might not be far from the country of the mythical or pre-historic race of Osiris, of Horus. Its site should indicate, as in the case of the Hycksos, the nearest point of contact with the Fatherland. Is it in the delta? By no means. Is it in Nubia? No. It is about midway between the northern and southern extremity of the oldest empire, at the locality to which the Greeks gave the name of Abydos, as they converted the Egyptian Taba into their Bœotian Thebes. If Mariette-Bey perseveres in his explorations of the mounds of Abydos which mark the site of ancient Thinis, the capital of the Pharaohs of the First and Second Dynasties, we may expect more light on that most ancient, and therefore most interesting, chapter in the Manethonian history of Egypt.

Subsequently, and apparently in connexion with hydrostatic works regulating the bed of the Nile and recovering land, at that time nearer to the sea than now, the capital is moved northward to within ten miles of the present Cairo, on the Lybyan bank. It becomes the far-famed city of Memphis, with its great graveyards at Ghizeh and Sakkara. After three dynasties have reigned there, the sixth goes further south than the primitive capital, and chooses the Isle of Elephantine.

I confess that these large, patent, indisputable facts do not encourage the adoption of any hypothesis of immigration under present knowledge. I do not say that they establish Egypt to be the locality of the rise and progress of the earliest civilization known in the world, but they justify an expectant attitude and beget a determination to persevering and continued research.

Assuming that learned Rabbis best know what their ancient writers meant in penning their cosmogony, chronology, and history, and that we have just entered upon the 5635th year of the world's age, and, furthermore, that the human species started afresh from the three sons of one Aramæan patriarch 2000 years after, there arises the ethnological question in what period of time the varieties of such species and subjects of our studies were established. What is the earliest date, on scientific grounds, of their existence?

Now here, as in most other scientific problems, we get the first

help from Egypt. If I were to select from ancient history a founder of ethnological science, I should take Thotmes III., of the Eighteenth Dynasty. He was the first and greatest collector of ethnological specimens, unconscious, of course, of their relation to our science. The last of Mariette-Bey's pregnant discoveries is a record (by Thotmes), in more detail than any other, of the countries, localities, and cities from which, in the course of his victorious campaigns, he obtained, for service, his examples of human races as at that date established. Thotmes may thus claim to be the oldest geographer as well as ethnologist. What were those races? In what degree had the human characters deviated from the Noachian or Syro-Aramæan type? This founder of ethnology shows us both the kinds and degrees of such variations. "How so?" you may ask. By coloured figures of his captives, suppliants, tribute-bearers. The walls of temples at Thebes are enriched with such frescos. The British Museum possesses parts of one at least 3000 years old, with its colours seemingly as fresh as when laid on. You may have contemplated that priceless ethnological testimony when you honoured us with your presence on Tuesday last. You would there see, first, the Egyptian subjects of Thotmes, his own people, bronzed and tanned, conventionally ochreous in tint, with well-developed muscular legs, in form and features repeating the ethnic characters in the contiguous magnificent sculptured representations of the monarch himself. Secondly, before him bow the Rutennou tributaries, with lighter complexion and hair, with a prominent hooked nose, with the full beard and other characters marking them as cognates of the Hycksos, of the Philistine or Palestine family, represented by modern Jews, and by the people whose features are preserved in our Assyrian sculptures. Thirdly, there is the unmistakable typical negro—black skin, retreating forehead, flat squab nose, prominent thick lips, receding chin, legs slightly bowed, poor calf, long tendo achilles, projecting heel, crisp woolly hair, short scanty beard. These bear the gold, ivory, leopard skins and other characteristic productions of the Soudan. In them you see the veritable progenitors of the enslaved and slave-hunting tribes of late subjected to the wholesome discipline of Sir Samuel Baker.

With this evidence of extreme varieties of mankind 1500 years B.C., which subsequently have undergone little or no amount of

change, the probability is great that in the time of Thotmes, 3000 years ago, there existed also red men in America, Maories in the Pacific, Mongols in China,. Ainos in Japan, Papuans in New Guinea, Tasmanians, not then extinct, nearer the Antarctic circle, Esquimaux at the opposite pole, and on the African continent dark-skinned people with Egyptian features, and a wide dispersion of sub-varieties of the Negro race. Physiology compels a retrospect far beyond historical periods of time for the establishment of these varieties. Geology lends her aid in expanding our conceptions of time past in relation to the existence of the source of these varieties—the last, highest organic form that "naked and on two legs" trod the earth. What evidence, not merely faith-exciting but knowledge-giving, have we of the earliest manifestation of Assyrian or Semitic civilization—that is to say, of literature, architectural and sculptural art, established ritualistic religion, priest and warrior castes, administrative officials—parallel in time with the evidence of such which Egypt has yielded? The Hycksos kings, in the course of their 500 years' usurpation of the delta, accepted the civilization, the arts, and, in part, the religion, of the higher race which they had partially subdued. When finally driven out—and they were pursued by the victorious Amosis as far as Palestine, as that pregnant contemporary record translated by M. Chabas teaches—they took with them such accession of ideas as they had acquired in Egypt. One invasion and conquest is the parent of another; the subjugated in turn becomes the subduer. The Amenophises, the Thotmes, extended the conquests of Amosis, the founder of their Dynasty; they overran Palestine and pushed onward, through Cœlo-Syria and by Carchemis, to the plains watered by the Euphrates and the Tigris, bringing back from the confederation of tribes of the subdued "Naharina," "Kanana," and "Rutennou," such slaves as they wanted for their mighty works in Egypt. In that hard school were trained additional teachers of the Assyrian and neighbouring populations. But how far above and beyond these glimpses of possible outward courses of the stream of Egyptian civilization stands its native source, brightly flowing through the first Twelve Dynasties, three thousand years before the time of Menepthah, the Pharaoh, probably, of the Exodus. The commencement of the Twenty-second Dynasty is contemporaneous with the reign of Jeroboam.

To come down to that better determined period of Hebrew history. In the reign of Sesac, or Sheshonk, of the Twenty-second Dynasty, about 1000 B.C., the kingdom of Judæa, through the conquests of David and the administrative capacity of the son (Solomon), who had secured the succession, with usual results in Eastern semi-civilized states to the rightful heir, was at its apogee.

What was the neighbouring nation or state most advanced in religion, letters, arts, administration, at that period? This becomes a question for the ethnologist of eastern races. To answer it on the grounds on which a geologist, a century ago, interpreted his phenomena, would be futile—could have no better result.

Of Chaldæa, of Assyria, at this period, little is contemporaneously recorded in response to our question, as to relative rise in civilization. For the builders, perhaps architects, of his Temple and palaces Solomon has recourse to Phœnicia. Hiram supplies his powerful neighbour. The explorers of the "Palestine Fund" have found Phœnician characters, not Cuneiform ones, on stones of the First Temple.

Does Solomon seek a foreign alliance by marriage? His embassy to that end is not to any Assyrian court—if such then existed—but to an Egyptian one. So highly did he esteem this alliance, that a royal palace, or hareem, was expressly built for the Egyptian bride. The collateral testimonies to events in the next reign of Hebrew history, such as the bas-reliefs at Karnak supply, justify scientific acceptance of the Biblical records of the respective conditions of Palestine, Tyre and Egypt in the time of Solomon. To the ethnologist it affords significant evidence of the relative antiquity of Assyrian and Egyptian civilization and status at the time of Solomon and Rehoboam.

The subjugation and heavy taxation of the Ten Clans of Samaria, or "Tribes of Israel," was the achievement of their near and powerful neighbour, seated on his rock-fortress, which his father David had wrested from the Edomites.

The revolt of Israel was not fomented by Assyria, but by Egypt. To that land fled Jeroboam, and to him the wily usurper of the throne of that Pharaoh whose daughter Solomon had married, assigned an Egyptian princess, and secured the co-operation, or neutrality at least, of Israel in the raid which Sheshonk meditated upon Jerusalem.

The boasted Temple no sooner lost its builder than it was sacked and despoiled of all that was precious—the "three hundred shields of beaten gold" and "all the vessels of pure gold" were borne off in triumph to the new Temple at Karnak, on the wall of which the records of Sheshonk's victorious campaign are still patent; and amongst the most interesting and instructive evidences with which that mighty wilderness of mural records abounds.

Where, again, we ask, was Chaldæa, or Assyria, in this march of events? Still, it would seem, in the low condition—may we not say semi-barbarous?—in which the subjugation by Pharaohs long anterior to Sheshonk had kept or left the Rutennou, as they are termed in Thotmes' annals. Centuries after Thotmes the ten tribes of Israel recover their freedom, their independency, through Egypt's aid, in Rehoboam's reign. The fugitive prince Jeroboam returns and becomes their first king, through the intervention of his royal connexion, and Israel has a history of its own.

Not until the reign of Hoshea, the eighteenth successor of Jeroboam I., do we find Assyria so advanced as to achieve, by Shalmaneser, the conquest of Samaria, and impose its slavery upon the Ten Tribes.

These, and such as these, are the considerations which must weigh with the philosophical ethnologist and historian in propounding any theory, worthy of acceptance, of the origin of Egyptian monarchy or of the chronological relation thereto of Chaldæan civilization.

It would be no exaggeration, in view of the conditions of Woodward's bequest to Cambridge, and those under which the gifted Buckland wrote his "Reliquiæ Diluvianæ," and beneath the social opprobrium that long hung over whomsoever ventured to interpret geological and palæontological phenomena adversely to dogmatic chronologies and stories of physical phenomena, to lament the loss of a century or more in attaining our present glorious liberty of looking, thinking, and prophesying on the antiquity of our planet and of the creatures that have enjoyed thereon the powers and privileges of life!

The ethnology of the so-called Semitic races of mankind seems not yet to have attained that liberty. She still, I fear, hugs her chains, or a remnant of them. I appeal, therefore, to my fellow Orientalists, to cast away prepossessions as to time, place, affinity, race, for which there may not be rightly-observed, well-determined

data, and to bring to bear on the dark vistas of the past, in human history, the pure dry light of science.

After chemistry, no science has been so sorely tried as biology, through changes of abstract terms; yet, when expressive of new and true generalizations and purgative of false notions, the gain has abundantly repaid and rewarded the trouble. Geology has abandoned the term "diluvial" as applied, in relation to the Noachian deluge, to any sedimentary formations. In England we have found it inconvenient and misleading to use it even as an arbitrary designation. May the time be soon at hand when truer terms—and no one fitter to propound them than Max Müller—will be applied, in ethnology, to groups of peoples and of tongues now called respectively Hammonic, Semitic, and Japetic!

*** Numerous photographs of native races, Pharaohs and other Egyptians of the oldest empire, were handed round to illustrate the paper, and a large map of Egypt, as well as a chronological table of the Manethonian dynasties, hung against the wall, to which the learned President of the Section frequently pointed.

ORIENTAL PROVERBS AND THEIR USES,

In Sociology, Ethnology, Philology, and Education.

By the Rev. J. LONG,

Late of Calcutta.

Oriental Proverbs embrace a very wide range, but I shall limit myself in this paper to that branch of them relating to India, and in use among the 240,000,000 British subjects of that vast continent. Those of Burma, China, and Eastern Asia are a distinct and interesting class, but little is known of them, though it is to be hoped that measures will be adopted for their publication and translation.

It is singular how Oriental Proverbs seem to be ignored in modern European works on Proverbs; writers on Proverbiology appear to be scarcely conscious of the rich treasure of folklore which exists in Eastern lands. Bohn makes no allusion to Oriental Proverbs in his popular and excellent works on Proverbs. Archbishop Trench, in his valuable Lectures on Proverbs, does not notice Oriental Proverbs; and Kelly, in his interesting volume, "The Proverbs of *all* Nations Compared," pays scant attention to the Oriental branch, though it would throw much light on the diversities of form assumed by the same idea among peoples long and widely separated, yet of the same great Aryan stock.

These, like other writers, forget the old maxim *Ex oriente lux*.

One reason of this doubtless was the distance of Oriental subjects from the European horizon of thought, and particularly those relating to folklore, which require for their full comprehension personal contact with the common people.

On the other hand, while Burkhardt, Roebuck, Freytag, Erpenius, Pocock, etc., etc., laboured nobly in the science of Proverbiology, Orientalists themselves have not given of late that prominence to Proverbs which they deserve, being, as defined by Aristotle, "Remnants, which, on account of their shortness and correctness, have been saved out of the wreck and ruins of ancient philosophy." Proverbs are truly fragments of wisdom and oral tradition floating down the stream of time, and we need a Colebrooke to notice them in this point of view, as they may perhaps afford a clue to certain affinities of Buddhism and Brahmanism, of the Pali and Prakrit languages.

Some Orientalists, however, like Lord Chesterfield, may think the study of proverbs mean and vulgar, unworthy the dignity of scholars,—for such the remarks of D'Israeli are not inappropriate: "Proverbs, those neglected fragments of wisdom which exist among all nations, still offer many interesting objects, for the studies of the philosopher and historian and for men of the world, they still open an extensive school of human life and manners."

Oriental studies will be more valued by the public at large when they are shown to deal with subjects that come home to the bosom of every human being—when philosophy is brought from the clouds to dwell among men. Many shrink from Oriental studies in these days of utilitarianism and hand to mouth knowledge; they think that, like metaphysics, they lead to no investigations of *practical* utility; that they do not pay in a commercial, money-making age: hence Orientalists are too often regarded as a species of modern mummies, investigators of dry roots, Old Mortalities making rubbings on tombstones.

I am old enough, however, to remember when the study of even Sanskrit was regarded of as little use as is now the study of the Schoolmen of the Middle Ages, but a wonderful revolution has taken place in this respect in public opinion: one cause of it I ascribe to the writings of the President of the Aryan Section of this Congress, Professor Max Müller, who, in his "History of Sanskrit Literature," and

"Chips from a German Workshop," has pointed out, in such a popular and fascinating style, the value of Sanskrit in relation to linguistic and social subjects. I can bear testimony to the revival of a zeal for Sanskrit studies in India among the rising alumni of the country on similar grounds. I myself published a little work for village schools, "Sanskrit Roots and Bengali Derivatives," and in a few years it has gone through eight editions.

We may hope then for a revival of an interest in Oriental Proverbs, and especially in a day when folklore is so successfully and enthusiastically cultivated in England, Germany and Russia; when even ballad societies are popular, and when it is a received maxim, "Nihil humani a me alienum puto."

The study of the masses is important in every point of view; they are now becoming politically our masters, and we should therefore know them.

The way in the East for the study of Proverbiology is also smoothed: the days of Halhed are passed away for ever, when he complained "that the Pandits were to a man resolute in rejecting all his solicitations for instruction in their dialect, and that the persuasion and influence of the Governor-General were in vain exerted to the same purpose." I myself have pursued inquiries regarding native literature in various parts of India, and everywhere, from the Pandits of Kashmir to those of Benares, Puna, and Travankur, have I found every facility offered me, while the editors of the native press threw open their columns to aid in my investigations.

In these days of utilitarianism and discursive study, no subject can gain a hold on the public mind except it be connected with objects historical, social, or religious. Oriental studies are in this respect winning their way, owing to the connexion they have with linguistic subjects, with the knowledge of man in his social development, with the history of religions, and with the interpretation of Scripture.

On these grounds Indian proverbs may claim attention in relation to—

I. *Sociology*, or the life and opinions of the masses in India.

II. *Ethnology*—the origin of the Hindu race—the aboriginal tribes—history and antiquities.

III. *Philology*—the archaic words and dialectic forms in local proverbs—their affinities with the Turanian and Aryan.

IV. *Education, Religion* — the use of proverbs in female and peasant education—in missionary teaching and preaching—in popular literature—in illustrating Scripture.

I.—Sociology.

We are too apt, after the manner of certain ethnologists, to judge the mental calibre of Eastern races by the colour of their skin, the peculiarities of their hair, or the size of their brain, ignoring the mind, of which language gives the expression and manifestation. Now proverbs, as "bearing the stamp of their birthplace, and wearing the colouring and imagery of their native climes," are most valuable guides for sounding the depths of the popular mind, so difficult to reach in the East. The wisdom of many is condensed in the wit of one; the people are made to describe themselves, and are by proverbs, as it were, put into the witness-box on trial; the inner life and national peculiarities are, as it were, photographed; they depict themselves, and are not surveyed through European spectacles.

An Italian writer remarks: "Days, months, years, centuries, pass away; in this interval words change their meaning, thoughts their hue; but proverbs remain alone firm and unflinching at their post, giving illustrations of the daily battle of life; they are the spontaneous generation of the people, who keep them as their hereditary property." This is strikingly shown in Indian proverbs. We have heard much of Portuguese, Dutch, and French influence in India, but proverbs show that this was a mere surface wave; the depths below were still and quiet, the foreigner did not influence those "short sentences drawn from long experience."

While the social life of the East is so little known to Europeans who are unable to lift the veil that hides domestic manners and customs, or to penetrate the Oriental's house, which is more his castle than the Englishman's is, proverbs project a ray of light into the dark recesses, they make the occupiers stand out to the light of day, the Zenana's veil is rent, and woman appears with her "inner man of the heart." Proverbs are the stronghold of the Oriental woman; in them she expresses her intense and most secret feelings; she makes them her soul. Thus Burkhardt, in his *Amsel el Mesr* (Arabic and

English, 1830), has, from the proverbial sayings in vogue at Cairo, illustrated the manners and customs of the Egyptian people.

How strongly are the predatory dispositions of the Turkomans shown in these proverbs used by them:

"If thy enemy take thy father's tent, join him and share the plunder."

"He who has worshipped the sword's hilt needs no further pretext."

"No grass grows where the Turk's horse treads."

What changes have been rung on what is called the want of natural affection, the ingratitude, of the natives of India; and it has been said they have not a word in their language to express gratitude. But proverbs tell a different tale; they show that gratitude or the memory of the heart pulsates in the Oriental as well as in the Western. A grateful person is termed *bandhi*, or *kritagya*, i.e. who knows what is done; an ungrateful one is *nimakhâran*, one who destroys his salt. As the Bengali proverb says:

"Whose food he eats, his praises he sings,
Whose salt he eats, his qualities he respects."

There is nothing the European in the East is more apt to form a false estimate of, with regard to the natives, than in relation to the intelligence and moral qualities of the common people, especially those so-called dumb animals the *rayats*, and the so-called enslaved women. Because the lower classes are not deep in booklore, they are supposed to be as dull as ditch-water; it is true they are not "books in breeches," they have not book-cram, but they have a strong undercurrent of information derived from observation, popular tradition, and conversation illustrated by proverbs. Their management of proverbs and keen observation of the phenomena of nature, show them to be a people of natural acuteness, who read through a man's character very soon.

Many pleasant hours have I spent in Bengal among the rayats by the side of a tank, or under the palm-tree's shade, talking on what was to them the cheerful topics of plants and proverbs, and in hearing their racy remarks. I was often reminded in a mango grove, of Bacon's aphorism, "The genius, spirit, and wit of a nation are discovered in its proverbs"—they are truly the *lokukti*, or people's

utterances, welling up from minds which for ages have been consigned by a despotic priesthood to the Sorbonian bog of ignorance.

The feelings of the people in relation to their superiors, whether priests or nobles, are often depicted in striking words in their proverbs. I remember one day in Calcutta talking with a European gentleman, who had just arrived in India, on the condition of the *rayats*, a Zemindar who was present said the *rayats* were well treated by the landlords. I said the *rayats'* proverbs did not seem to indicate that state of things, and I quoted the well-known Bengali proverb—

"*Musulmaner murghi posha*
Jamidárer bhálabáshé,—

i.e. the same love the Musulman has to his fowls (which he keeps for slaughter) the Zemindar has to his *rayat;* or, as a Musulman Governor of Bengal said, "The people were like sponges which retained the water until it was convenient to squeeze it out."

This investigation of proverbs gives a more genial view of the common people. It is too much the practice of Europeans in the East to call natives niggers or black fellows. They see only their dark side, and rank them as barbarians, though they themselves would find it very difficult to give an accurate definition of civilization. Matters, however, are greatly improved since Colebrooke wrote the following words:—"Never mixing with the natives, a European is ignorant of their real character, which he therefore despises. When they meet, it is with fear on one side and arrogance on the other. Considered as a race of inferior beings by the appellation of black fellows, their feelings are sported with, and their sufferings meet no more compassion than those of a dog and monkey."

II.—Ethnology and History.

Proverbs have been very properly styled the *coins* of history. They are records of the past, not graven on stone, but on the fleshly tablets of the heart. Like the etymology of words and proper names, they throw light on geography, antiquities, and local history. They give us in a condensed form the voice of tradition, so valuable regarding

[1] The term *nigger* applied to natives is used chiefly by officers of the Queen's Army, who dislike the Hindus, "hateful and hated," on the principle of the Russian peasants, who call the devil *tchert*, or the black fellow.

a people which, though full of intellectual life, and delighting in abstract science, has so few historical records.

While the *Mohammedan* and *Persian writers* have given us such valuable works on Indian history, with the exception of the *Rajatarangini* we have no political history from the Hindus. We have, however, in their dramatic literature a clue to much of the social and intellectual history of the people, their manners and feelings. The Bengali popular drama, dealing largely in proverbs, is very rich in this respect. I sent more than two hundred pamphlets on this subject to the Paris Exhibition, and the Commissioners were pleased to award me a medal for it.

I have published a collection of 6000 *Bengali Proverbs*, and have prepared a translation of them with notes. They throw light on the Bengalis, who were always a subject and submissive race, and hence did not choose to criticize their conquerors in their proverbs. Still we have various references to points of local history, to eminent characters, notices of temples, and places of pilgrimage, which might be used, as Fergusson does architecture—throwing light on antiquity from fragments surviving the wreck of time. What an inkling, for instance, is given as to the interference of the Moslems in Bengali social life in that pithy Bengali Proverb—

"*Ask the Kázi* (a Moslem judge), *the Hindu has no holidays.*";

Or in reference to the poor and proud Moslem noble—

"*Like a Hindu's cow, or a Musalman's bastard,*
One is of little use, the other vicious and contemptible."

The problem relating to the *migrations* of nations from their original seat in Central Asia—how and in what order they proceeded and settled in Europe and Southern Asia—is still unsolved. The grammatical and lexicographical affinities of their respective languages afford a certain clue, so do their village municipal systems, common to the Teutonic, Slavonic, and Indian races, as also the tribal or communal rights in land which existed among the New Zealand tribes, the Kelts, the Slavs of Russia, and the Hindus of India. Maine's "Village Communities of the East and West" gives a good popular view of this subject.

Proverbs, as going back to pre-historic days, may shed some light on this subject. We give illustrations of this from the *village*

communal system that existed on the same principle both in India and Russia, as well as in England at an early period.

The Russian Proverbs say of the *Mir*, or village community,

"*What the Commune has arranged is God's decision.*"

"*Over the Commune there is no Judge, but God.*"

"*The neck and the shoulders of the Commune are broad, it will carry all.*"

"*The Commune sighs and the rock is rent asunder.*"

"*A thread of the Commune becomes a shirt for the naked.*"

"*The Commune is answerable for the country's defence.*"

The *Bengali Proverbs* say of the village council, composed of ten, seven or five persons,

"*Where ten persons are gathered together, God is in the midst.*"

"*What ten persons say has a foundation.*"

"*The power of ten persons is equal to a lion's.*"

"*From the mouth of ten persons truth.*"

"*Seven thieves assembled can divide even peas.*"

"*Ten flowers together make a nosegay.*"

The *Aborigines* of India are a portion of that outcast race which once occupied all America, Northern Europe, Africa, Australia, and the Isles of the Pacific. A great problem connected with the Aborigines, or *Dasyas*, in India, is how they came there, and where they came from, and how they intermingled with the Aryans; whether they came from Western Asia, through Scinde and the Panjab, or from North-Eastern Asia, or, lastly, whether they are of Mongolian origin. Their small eyes, high cheek-bones, hairless face, broad, short nose, lend some countenance to the last theory, as also the fact that it is now generally admitted that all Eastern and Southern Asia, including India, was occupied by tribes speaking a Turanian language.

The *stone monuments*, extending in an unbroken chain from India, through Persia, the Mediterranean Coasts and France, to Britain and Scandinavia, together with identical superstitions, traditions, etc., also indicate a common influence.

Among the Aborigines we have no clue in buildings or books. Language, as given in their proverbs, may therefore be some guide through the darkness of antiquity, throwing light on the origin

of those mysterious children of the mist, as they came in successive layers into the plains of India.

To use the language of Max Müller, "Every line, every word, is welcome, that bears the impress of the early days of mankind." In accordance with this principle, efforts should now be made to collect, translate, and annotate the proverbs of the Aborigines through India. What Hodgson and others have done for their languages, should now be completed by collecting and translating their proverbs. When in the Nilgiri hills, I obtained a collection of Badaga Proverbs, translated into English; but these contained only a selection chosen to illustrate the use of proverbs in preaching, and showing the Badaga people's notions of right and wrong.

III.—Philology.

After eliminating the Sanskrit or Semitic elements from the Indian languages in their Prakrit and modern form, we come to a primitive or Turanian element common to those languages which were spoken through India before the Brahminical invader crossed the Himalayas and drove the Aborigines to the hills and *Dakshin Aranyea*, or forests of the great south.[1]

As in the Romance languages of Europe there are many words not derivable from Latin, but imported from the Teutonic, Arabic, or other languages, and which are to be found in proverbs, so is it with the Bengali, Hindi, Telugu, Mahratha, etc., in their non-Sanskrit elements, in which are to be found what the Spaniards call the sayings of old wives by their firesides. These archaic words and forms in proverbs may give us some clue as to the steps by which Sanskrit passed into the Prakrit, and then into the modern vernacular

[1] The aborigines were formerly very numerous in India. In an account of the Bhar tribe, by Mr. Sherring, we have the statement that 700 years ago the whole of the Benares Province and a large portion of Oude were chiefly in the hands of aboriginal non-Aryan tribes, until the fall of Delhi and Kanauj in the twelfth century set free the great Rajput families, who gradually ousted the aborigines from their landed possessions; the latter had occupied the valleys, and were gradually driven off to the hills, as the Brahmans cleared out the forests and polished off the swine-eating, spirit-drinking, black races, who led a wild gipsy life; these, however, were more civilized than is commonly thought, but degenerated in their impenetrable fastnesses, girded about with the deadly *terai*.

form, and how the languages were affected by the successive waves of conquest.[1]

While much has been written on palæography and the adapted alphabets of the Aryan races, this subject of comparative proverbiology of the East in relation to the migration and affiliation of language has been little dwelt upon. Mr. E. Thomas, who has rendered such service to history and antiquities in relation to coins, has referred to the use to be made of *Alphabets* in connexion with the progress of Aryan immigration from the Oxus into the Provinces of Bactria and along the Hindu Kush, and of the line of march of the Aryans entering as a pastoral race into the Panjab; he supposes that the Devanagari was appropriated to the expression of the Sanskrit language from the pre-existing Pali or Lat alphabet, which may have been a very archaic type of Phœnician, the Pali itself having been the current writing of India B.C. 250. Mr. Thomas thinks the Sanskrit character is derived from the Dravidian—a rather startling point for Orientalists. Some light may be thrown on this intricate subject from investigating any connexion between Dravidian and Sanskrit Proverbs.

Comparison is now used as an important instrument of research, as we see in comparative mythology, in the comparison of fables of different nations, in the comparison of the village systems of the East and West, in the comparison of the grammatical and lexicographical structure of languages, and in comparative anatomy; but in the comparison of the proverbs of the East and West, especially in their archaisms, we have a new and untrodden field. Excluding proverbs that "bear the stamp of their birthplace, and which wear the colouring and imagery of their native climes," there are those which arise from the feelings and expressions of a common nature, which bear strong affinities, as if derived from a common birthplace.

IV.—Education, Religious Instruction.

In relation to the important subject of *Female Education* in the East, Oriental Proverbs show that women are not such dull unobser-

[1] The Poems of Chand, about the twelfth century, are some of the earliest specimens of the modern Hindi vernacular. They ought to be consulted for archaisms in proverbs, as the language was probably formed a century previously.

vant beings or so submissive to their husbands as popular report affirms. Native females are fond of proverbs, and can wield them with such effect as to be able to carry on a scolding match for half an hour in sharp language, plentifully interlarded with proverbs, and far eclipsing Billingsgate in point.

In teaching females and rayats great use may be made of this love of proverbs to illustrate European and Biblical ideas. I have for many years practised that myself, and found it most useful, and I have met with various works in French and Italian which take popular proverbs as the texts for moral and religious instruction. Such works abound in Spanish, like those of Cervantes, who, in his Don Quixote, was one of the first to point morals with proverbs.

The tendency for many years in Indian popular *literature* has been to adopt, after the Pandit fashion, a stilted pedantic style, sesquipedalia verba—Johnsonian, not Addisonian. This has been found a great hindrance to female and mass education, strewing the path of knowledge with thorns. Happily there has been a reaction of late years in favour of a racy nervous style, *chalita kathá*, drawing largely on proverbs for illustration. Our Indian Dictionaries unfortunately omit these racy proverbial expressions.

Slowly but surely missionaries in India are advancing in their knowledge of the undercurrent of native opinion; but their progress would have been more accelerated had the principle been acted on that, to impress the Oriental mind effectually, you must acclimatize the foreign idea in the Oriental way by similes, metaphors, proverbs, which are solvents to a new idea. Long ago, Bishop Latimer, addressing his Saxon audience, found this the shortest and pleasantest way to their understandings. Buddha Ghosa's sermons are, in this respect, well deserving the study of the Christian missionary, as are also the productions of the Jesuit missionaries in South India, who adopted Oriental metaphors and the flowery language of the East. See the works of Beschi for example. The profoundest thoughts of ancient times were given in the form of *sutras*, or aphorisms; the proverbs, as expressing popular wisdom, are their modern substitute.

The Proverbs of Solomon and the Book of Ecclesiastes, which reads like a fragment of Hindu philosophy, require annotations from commentators who have studied the proverbial philosophy and aphoristic

wisdom of the East, of which proverbs are the popular expression. Are not these as necessary for a Scripture commentator as the study of trigonometry would be for a mathematician?

It is stated of the Divine Founder of the Christian religion, that without a parable spake he not to the people. He adopted the principle which pervades so much the Scriptures, of clothing naked abstract truth in the graceful garb of metaphor. Christ, in fact, acted and taught as an *Oriental Guru*, a character which none of the European writers of Christ's life has invested him with, not even Dr. Farrer, one of the latest and best of them. One reason, doubtless, for the common people hearing Christ gladly was owing to the free use of parables and proverbs in illustrating the lofty truths of his religion. The preachers of dreary platitudes in sermons have no precedent from Christ.

Mr. Metz, a German missionary in the Nilgiri hills, published an interesting book on the hill-tribes of that region, with a translation of some of their proverbs. In his preface he states: "A knowledge of their proverbs and old sayings I have found of great service to the missionary cause. Often when the persons to whom I have been preaching have been listless and indifferent, a happily selected proverb, quoted in exemplification of what I was saying, has had the effect of exciting an interest in the discourse and of fixing their attention."

Preaching to Orientals must have point instead of platitude. Even their works on grammar, jurisprudence, medicine, are cast in a poetic mould, and they have long acted in the spirit of Bacon's aphorism, "Proverbs are the tools of speech which cut and penetrate the knots of business and affairs."

Some have represented preaching to Hindus as useless, on the ground that people cannot understand the subject of Christian dogma. This objection is feasible if the style of preaching to Orientals be as dry and skeleton-like as is that of some country clergymen in England to farmers and day labourers.

In 1869 a work was published in Madras, the *Bazar Book*, or Vernacular Preacher's Companion, containing addresses on thirteen prominent points of the Hindu religion, with a few poetical quotations, selected with great care from Hindu works, intermixed with proverbs and proverbial sayings. The book was designed to utilize in

favour of Christianity the metaphors of native literature employed by some of the leading Madras poets.

In 1871 I published in Calcutta a work with the title of *Christian Truth in an Oriental Dress*, furnishing illustrations of the Scripture from Oriental proverbs, similes, emblems. I found the subject in this form understandable by even the lowest peasants. A second and improved edition is preparing for the press.

Desiderata.

The present is a *transition* state in the East. The spread of education and the influx of European ideas are sweeping away many of the recollections of the past. Local dialects are gradually disappearing, and words and proverbs, which might throw invaluable light on the dark recesses of the history of the language and people they are connected with, are flitting away with them. Old traditions are dying out, and it is remarkable in Bengal how inferior the new class of Pandits is in their knowledge of traditional folklore and Pauranic interpretation to the men of the last generation. I have observed many painful illustrations of this.

Now is the time for collecting proverbs, songs, local traditions, folklore, aided as we may be by the educated natives, and the editors of the native newspapers; the Asiatic Societies of Bengal and Bombay, the Social Science Association of Bengal, and the Directors of Public Instruction in the different Presidencies, may also give their aid.

What are required are

From India.

1. The Proverbs in the *fifteen* leading languages of India, *classified* in the division of Aryan, Semitic, and Turanian, and *compared* as to their subjects, affinities, variations, and early use.

2. The collection, classification and comparison of the proverbs of the *aboriginal* and wandering tribes of India, such as the Sonthals, Khonds, especially the tribes in the Himalayas, Central India, and the Nilgiris.

3. *Sanskrit* Proverbs as distinguished from aphorisms and maxims. Boehtlingk's excellent Sprüchworter are not strictly proverbs, but similes, aphorisms and proverbial sayings. We need a selection of Sanskrit Proverbs from the Vedic or Pauranic writings, similar to those extracted from the Scandinavian Edda.

4. *Dictionaries* of the Indian languages, giving the meaning of archaic words in proverbs, with illustrations.[1]

5. The Tartar or *Turanian* Proverbs of India compared with those of Central Asia.[2]

From Europe.

1. The proverbs of the *Gipsy* tribes in Europe compared with those of the Gipsies or *Nuts* of India in their origin and affinities. I have met Gipsies on the banks of the Volga near Samara in Russia, as well as in Moscow, where they have been settled for several centuries.

2. The *Keltic*, *Magyar*, *Finnish*, and *Slavonic*[3] Proverbs in their Oriental affinities.

3. *Russian*[4] Proverbs in their relations to Oriental ones.

[1] Dr. Dahl, in his great Russian Dictionary, Tolkovovui Slovar Jhivago Velikorusskago, illustrated by proverbs, has set an example to Europe and India of a new style of dictionary, with its quotations of common words drawn from the people's sayings, the tongue of the domestic hearth, and of the inner life of a people.

[2] Dr. Caldwell, in his Dravidian Grammar, states that the Toda tribes of the Nilgiris in South India have an affinity with the Finns and Lapps in their language, as well as with the Ostiaks of Siberia, and that the Dravidian languages of South India are allied to those of tribes which overspread Europe before the arrival of the Goths and Celts.

The Eastern Iranians were the founders of Central Asian civilization, and Sir H. Rawlinson has shown that the belief in a very early empire in Central Asia, coeval with the institution of the Assyrian Monarchy, was common among the Greeks long anterior to Alexander's expedition to the East.

[3] The Slavs are semi-Oriental in their customs and modes of thought. I was deeply impressed with this aspect in my visits to Russia, especially in relation to their proverbs, which have an Asiatic colouring about them, very perceptible to any one acquainted with the Indian mind. Their proverbs on women are especially satirical and caustic.

[4] Russia has made great progress in the collection of her proverbs. There is Dr. Dahl's great collection of 25,000, in richness and variety equal to the Spanish, the result of the investigations of a quarter of a century, arranged and classified according to subjects. I published six years ago in Calcutta an English translation of 600 of them, which excited much attention on account of their point and wit as well as their Oriental ring. I had them translated, and, through the liberality of Lord Napier, I offered prizes for the best comparison between them and Bengali Proverbs.

From Africa and America.

1. The Proverbs of the *Indians* of America, in the light they throw on the Eastern origin and migration of those tribes.

I met at Hartford, Connecticut, Mr. Trumbull, the greatest living scholar in the Indian languages. He might aid in this.

2. The *Negro* Proverbs of America.

When travelling lately in the United States, I made inquiries in various quarters as to the proverbs in use among Negroes. A Negro clergyman, the Rev. Dr. Crummel, of Washington, is instituting inquiries on this subject, and the Smithsonian Institution of Washington will assist him.

Captain Burton, in that valuable work "The Wit and Wisdom of Africa," remarks: "The West African tribes are those who delight most in proverbs, even more than the Spaniards; but in America the Negroes, like the Brazilian descendants from the Portuguese, seem to have lost many of them." Burton and Koelle have, however, given sufficient proverbs to vindicate, in spite of some anthropologists, the claim of the African to a place in the great human family. He may be monkey-faced, but who could conceive of a gorilla uttering a proverb?[1]

But the great desideratum is not the mere collection of proverbs, but the *interpretation* of them. This can only be given by those living among the people who speak them. The meaning is often very obscure, arising not only from the use of words not found in a dictionary,[2] but also from references to local usages or traditions,

Hilferding and the Philo-Slavs of Russia have done much to direct the attention of Russian scholars to explore the rich mines of thought in Russian proverbs. See on this Snegirev's Ruskie v svoikh poslovitzakh, a most valuable work, commentating on, classifying and comparing Russian proverbs.

[1] Here are a few African proverbs:

"*Wisdom* is not in the eye, but in the head."

"I will *pay* thee when fowls get teeth."

"As to the *future* even a bird with a long neck cannot see it, but God only."

"*Women* are more numerous than men, for men who listen to women's sayings are counted as women."

[2] We have in the case of the Vedas the great controversy between Wilson and Colebrooke on the one side, and some leading Germans, as Roth, Rosen, on the other, as to the value of the traditional interpretation of the commentators; with respect to proverbs, a similar controversy cannot arise, as there are no dictionaries giving the archaic words.

or to stories which they point, their language being concise or epigrammatic.

The meaning or meanings of proverbs is the crux, for they are often used in various senses, and are applied in a different way by different people. Hence I made it a rule when preparing a translation of my 6000 Bengali Proverbs, when there was any obscurity in the interpretation, to take the opinion of three intelligent natives, each from a different locality; the common people and women who use these proverbs I found were the best interpreters of them.

In some proverbs the perfume is lost in the process of translation, others are untranslatable. The love of poetry, which made the Hindus enshrine their dictionaries and mathematical works in verse, has caused them to use words for the sake of the metre, which are untranslatable, like as in the Scotch:

"Every mickle makes a muckle."

Professor Wilson states that the Sanskrit language consists, for a great part of the language, of botany and mythology; their mythology is the main structure, their botany the chief decoration of their poetical composition. The same remark is applicable to proverbs. The Telugus, for instance, express the idea of a dog in the manger by the *Tirupati barber*. Tirupati is a shrine near Madras, one barber has the monopoly of shaving all the pilgrims; they come in crowds, but as he can only shave a few at a time, numbers have to wait; still he will not allow another barber to do what he cannot do himself.

Finally, one must be careful to explain to natives what a proverb really is. I recollect when with Colonel Dalton, who has written so ably on the Kol tribes, we could not make a Kol understand what was meant by a proverb.

EXAMINATION OF THE

FRAGMENT OF IRON

FROM THE

GREAT PYRAMID OF GIZEH.

By St. JOHN VINCENT DAY,

Assoc. Inst. C.E., F.R.S.Ed., etc.

Whilst not a little controversy has taken place upon the question whether the Proto-Egyptians were acquainted with and used iron, it has escaped the notice of every Egyptologist, without exception, that the most convincing testimony in confirmation of the use of that metal in the earliest age which the human intellect has yet fathomed existed in our national treasure-house, the British Museum.

When Colonel Howard Vyse was conducting his famous researches in Lower Egypt during the third decade of the present century, one of his assistants, Mr. Hill,[1] "discovered a piece of iron in an *inner* joint, near the mouth of the southern air channel, which is probably the oldest piece of wrought iron known. It was sent to the British Museum with the following certificates:—

"This is to certify that the piece of iron found by me near the mouth of the air-passage in the southern side of the Great Pyramid

[1] See "Pyramids of Gizeh." By Colonel Howard Vyse. Fraser, London, 1840. pp. 275-6.

at Gizeh, on Friday, May 26, was taken out by me from an *inner* joint, *after having removed, by blasting, the two outer tiers of the stones* of the present surface of the Pyramid; and that *no joint or opening of any sort was connected with the above-mentioned joint,* by which the iron could have been placed in it after the original building of the Pyramid. I also showed the exact spot to Mr. Perring on Saturday, June 24th. J. R. Hill.

"*Cairo, June 25th,* 1837."

"To the above certificate of Mr. Hill, I can add, that since I saw the spot at the commencement of the blasting, there have been two tiers of stones removed, and that if the piece of iron was found in the joint pointed out to me by Mr. Hill, and which was covered by a large stone, partly remaining, *it is impossible it could have been placed there since the building of the Pyramid.* J. S. Perring, C.E.

"*Cairo, June 27th,* 1837."

"We hereby certify that we examined the place whence the iron in question was taken by Mr. Hill, and we are of opinion *that the iron must have been left in the joint during the building of the Pyramid, and that it could not have been inserted afterwards.*

"Ed. S. Andrews.
"James Mash, C.E."

"The mouth of this air-channel has not been forced; it measured 8½ inches wide by 9½ inches high, and had been effectually screened from the sands of the desert by a projecting stone above it."

There is probably no other relic in the whole vast Egyptian collection—which in the sense of diminishing those difficulties which have arisen in accounting for the means by which the various hard stones used in ancient Egypt were dressed and cut with the finish and precision which they to this day retain—so important as this solitary specimen of iron. And even the testimony which it affords could not have descended to our times, but for the fortunate circumstance of its being walled up quite out of the reach of the atmosphere deep down in the solid masonry of the building which has enshrined it, and the absence of which protection has permitted what other iron was used in those primeval days to pass out of sight by decay and rust.

The author first drew attention to the fragment of iron under

reference in a paper communicated to the Philosophical Society of Glasgow on April 12th, 1871,[1] and almost simultaneously with the publication of that paper Dr. Lepsius had communicated to the Royal Academy of Sciences, Berlin, his learned paper[2] on the metals mentioned in the Egyptian Inscriptions, wherein he marks out the difficulties regarding the ancient use of iron in Egypt, noting in particular the uncertainties as to the hieroglyphic rendering for that metal.

The author having early in 1873 sent a copy of the aforesaid paper to Dr. Lepsius, that Prince of Egyptologists wrote with respect thereto as follows:—

"There was no doubt for myself that the use of iron in Egypt was at least as old as the quarries of granite, and granite blocks are found abundantly in the oldest Pyramids. But the fact had escaped my notice, as well as the notice of Wilkinson, that Colonel Vyse's, or rather Mr. Perring's researches, had brought to light the piece of iron hermetically isolated of which you speak. Also the other fact was new to me, that iron may be worked before it becomes fluid," etc., etc.

Having met Dr. Lepsius at the recent Congress of Orientalists in London, our conversation naturally turned to a subject on which, from different stand-points, both he and the writer had carried on independent researches, which in point of time coalesced in proving that iron was known to the Proto-Egyptians. When examining the fragment of metal together, Dr. Lepsius, judging from its form, suggested that the fragment had been part of a scraping tool for finishing stone surfaces, and inquired of the writer if he thought it might not be steel. Such a suggestion certainly did not present any difficulty, for the manufacture of steel by the Greeks, who got their information from Egypt in later times, is described by Aristotle, and not a little singular is it that Leiht-ze, the Chinese philosopher contemporary with Aristotle, also describes the use of steel in China, thus rendering it highly probable, that when nations so entirely differing and widely separated as the Greeks and Chinese, are found to possess at the same time the use and manufacture of a substance

[1] Vide Proc. Phil. Soc. Glasgow, vol. vii. p. 476.

[2] Die Metalle in den Ägyptischen Inschriften, von C. R. Lepsius, aus den Abhandlungen der Königl. Akademie der Wissenschaften zu Berlin, 1872.

so important as iron, that such use and manufacture constituted a portion of that stock of knowledge common to all mankind at some far remote epoch.

Considering then in this light the degree of probability of confirmation attaching to Dr. Lepsius' suggestion, it occurred to the writer that its value might be estimated by a simple mechanical test—namely, by attempting to drill a hole in the fragment. The conclusions to be drawn from such a test would be:—

1st. That if the drill easily penetrated the metal, it might be concluded that its condition was that of *Iron*.

2nd. If on the other hand the metal resisted the cutting action of the drill, then it might be concluded upon as *Steel*.

Some members of the Congress, especially Dr. Lepsius and Mr. Bonomi, pressed the importance of this test being made upon the attention of Dr. Birch, who consented to expose the fragment for being tested in the manner indicated, and on the morning of September 18th, certain members of the Congress accompanied Dr. Birch to the Museum for this purpose.

The test was made by the writer, and the following certificate with respect thereto was drawn up by Dr. Birch, and attested by those whose signatures are appended to it:—

"*British Museum*, 18*th September*, 1874.

"An examination by drilling of the fragment found in the channel of one of the air-passages of the Great Pyramid, in the excavations undertaken by Colonel Howard Vyse. It was found that the fragment was of *Iron*, the drilling having penetrated it."

Signed { S. Birch. / St. John V. Day. / R. Lepsius. / Chas. Seagar. / J. Bonomi.

P.S.—Since the above was written, the author pressed upon the notice of the Trustees of the British Museum the importance of having this old piece of iron analysed chemically—and to this request the Trustees consented, instructing Dr. Flight to make the analysis—and which has accordingly been done. The analysis will be found in the author's "Prehistoric Use of Iron," in course of publication.

NOTES ON THE CASTES

AND ON

CERTAIN CUSTOMS OF THE DARDS.

By FREDERIC DREW.

Those of the Dārd race to which the following notice refers inhabit the districts of Astor and Gilgit, and certain parts of Baltistān.

The more important caste divisions of the Dārds seem to be the following:—Ronū, Shīn, Yashkun, Kremin, Dūm. As to the one called Ronū, I am in doubt what weight may be attached to the division. It seems to be a caste less generally occurring than the others; still, in the Gilgit valley there are certainly some families of a caste called by that name which ranks the highest of all.

The other four divisions, to which I shall now confine attention, are the same as are stated regarding the Chilāsīs in a report by Captain Ommaney to the Panjāb Government; one of Dr. Leitner's informants also, a native of Sazīn, speaks of the same four primary divisions. Dr. Leitner himself adds the names of many other castes; these, I think, are only sub-divisions of some of those enumerated.

With the thought that such circumstances as the division into castes, and the relative social position of those castes, may, if not now, yet eventually, when more facts for comparison are known, throw light on the history of the Dārd race, I now bring forward what little information I have collected.

Beginning with the lowest, we find the Dūms, who are few in number, acting as musicians and dancers.

Now these occupations are followed by the Marāsīs of the Panjāb and by the Doms of other parts of India. These latter tribes, who are of the lowest castes, are recognized as belonging to the non-Aryan Indians. The fact of the same part in the social system being played by a tribe held as the lowest among the Dārds, also leads one to speculate on the former existence of a pre-Aryan people in the area now chiefly occupied by the Dārds.

The existence of any remnants of these pre-Aryan tribes has hitherto only been known as far northward as the outer ranges of the Himalayas. I will now put together what facts I know that may enable us to trace them further in, that is to say, among the higher, the snowy, mountain ranges.

Immediately north of the Panjāb, in the outermost hills, the low castes who represent the non-Aryan element—those whom the Hindūs consider as outcasts—are very distinct. In spite of an admixture of blood that has undoubtedly taken place, they show a darker skin, a frame more slim, and less fine features, than are possessed by the higher castes, who are decided Aryans. Here the low castes bear the names Dhiyār (these being iron-workers), Megh, and Dūm.

Going higher up, among mountains that are ten or twelve thousand feet high, we find among the hill-races, there commonly called *Pahārī*, representatives of the same low castes under the same names; but they have been raised in physiognomy from those of the lower hills in a way paralleled by the change observed in the higher castes also of the two localities.

We next come to Kashmir. There the lowest caste is one called Bātal. To the Bātals is relegated the lowest kind of work, and from them also come the singers and dancers. These people are kept socially very distinct from the rest of the Kashmiris. The parallelism of their position with that of the Dūms, etc., of the regions first mentioned, is such as to justify our thinking that we are following up the same or closely allied tribes.

Next is Ladākh. Here the population seems thoroughly Tibetan. But here also there is a low caste, the name of which is Bem; it supplies the blacksmiths and the musicians; as to dancing, the whole population is given to that. I think it possible that these Bem also may be allied in origin to the low castes of the other countries, although so much assimilated to the Tibetans.

The coincidence certainly is striking, that in every, or almost every, case, those castes who are of the very lowest estimation—those who are held as unclean and outcasts—should follow the same occupations, and I myself incline to connect them all together in origin, and to consider that they were all pre-Aryan inhabitants of the various countries, who have become, by a partial non-observance of the rules against intermarrying, in various degrees assimilated in blood with the various races—whether Dogra, Kashmiri, Tibetan, or Dārd—who conquered them and occupied their country. The importance of such a conclusion, if it be a true one, consists in this, that it gives to these earlier inhabitants of India a much greater extension over the Himalayas than has generally been allowed to them, that it traces them far into the snowy regions, among the very highest mountains.

Reverting now to the Dārds, we come (reckoning from below) to the second caste. This is called *Kremin*. It is not a numerous caste. As to occupation, the Kremins seem to correspond to the *Kahārs* of Hindostān, the Jīwars of the Punjāb. They act as potters, millers, and carriers. Thus they seem to be analogous to the Sudras of India. If so, they would probably be the produce of intermixture of blood of the Dārds proper and the race that the Dūms belonged to. They would most likely be the descendants of those of the earlier race who most quickly came into social communion with the invaders.

The next higher caste, called *Yashkun*, is, in most of the parts of Dārdistān that I have visited, the most numerous of all. In Astor and Gilgit the Yashkun form the main body of the people, whose occupation is agriculture.

Above them come the Shīn. The Yashkun and the Shīn have a physique equally fine, and as far as I know they follow the same occupations. Still the Shīn are distinctly recognized as socially higher than the Yashkun. The only characteristics peculiar to the Shīn with which I am acquainted are one or two exceedingly strange customs.

The way in which the Shīn regard the cow is, especially to any one coming from the side of India, most astonishing. They abhor the cow. They look on it almost or quite in the same way as that in which an ordinary Muhammadan regards the pig. Of necessity they make use of cattle for ploughing, but they touch them and have to

do with them as little as possible. They will not drink cow's milk, nor will they make butter from it. They will not burn that so common fuel in the East, cow-dung. Lastly, when a cow calves, they will put the calf to the udder with a forked stick, and will not touch it with their hands.

I have found some other customs accompanying this peculiar one of the Shīn. At one place, for instance, they would not eat fowls nor touch them.

In spite of these peculiar customs, the Shīn and the Yashkun seem to be closely allied. They probably already existed as one nation at the time when the Dārds dispossessed the earlier inhabitants of these regions.

So much for the succession of the castes. I now wish to bring forward another fact respecting the Dārds. It is this, that while nearly all of them within the districts named are Muhammadan, there are some communities of them, occupying certain out-of-the way villages in the Indus valley, who have adopted the Buddhist faith.[1] The people of these villages obey the Lamas as spiritual leaders, though none of them have become Lamas themselves.

The close connexion of these villages with Ladākh, as evidenced, or as brought about, by their adoption of its religion, has resulted in some but not most of them losing their Dārd tongue and acquiring the Tibetan.[2] The two races, however, keep quite distinct; no assimilation of blood is going on.

These Buddhist Dārds must, I take it, be of the Shīn caste; they hold in an extreme degree to the custom concerning cows above described. They seem to have reached their present habitat in one of the earlier of the Dārd migrations southwards; in all probability they came in contact with the Buddhist Ladākhīs before they came in contact with Muhammadanism; and that they passed from their early idolatry to the idolatrous form of the Buddhist faith.

In conclusion, I wish to guard myself against being thought to be at all positive in favour of the theory I have put forward as to the origin of the lowest castes among the Dārds and the neighbouring races. It is to be counted merely a tentative one; the chief use

[1] The principal of these villages are Garkon, Dāh, and Hanū.

[2] It is in the villages of the Hanū valley that Ladākhī is spoken.

of it may be to direct the inquiries of future travellers to the subject.

As to the higher castes of the Dārds, their origin is a question of extreme interest; the only facts concerning it that are clear to me are these, that they entered the country in question—that is to say, Gilgit, Astor, and Baltistān, and reached to the borders of Ladākh—from the north-west or north, and that they did so by more than one movement.

SUR LES CAUSES QUI ONT FAVORISÉ

LA PROPAGATION DU BOUDDHISME

HORS DE L'INDE.

PAR L. FEER.

LA propagation du Bouddhisme, de cette religion, indienne par son origine et par son esprit, portée chez un si grand nombre de peuples entièrement différents de celui au sein duquel elle avait pris naissance, est certainement un des évènements les plus remarquables de l'histoire. Nous ne nous proposons pas ici de l'étudier dans tous ses détails d'une manière approfondie et complète; ce serait un travail immense. Nous voulons simplement donner un aperçu des causes qui ont fait accepter le Bouddhisme par tant de nations asiatiques. Cette question qui intéresse à la fois la race âryenne et des races non-âryennes rentre naturellement dans les études ethnographiques.

I.

Les religions ont en général, à leur origine, un caractère exclusivement national et local. Non seulement chaque peuple a ses dieux, sa religion propre, mais chaque tribu, chaque ville, chaque famille, chaque individu a la sienne. Le Judaïsme lui-même n'a point fait exception à la règle; même en tenant compte des déclarations formelles qui le représentent comme devant être la religion unique, universelle, et annoncent la diffusion du culte de Jehovah sur toute la surface de la terre, on est obligé de reconnaître que le Mosaïsme

n'en reste pas moins la religion des enfants d'Israël, le culte spécial et privilégié d'une race particulière.

Deux religions seulement ont pris un caractère essentiel d'universalité—le Christianisme et le Bouddhisme. Nous laissons de côté l'Islamisme (quoiqu'il prétende aussi à l'universalité), parce qu'il n'est au fond qu'une monstrueuse hérésie chrétienne, et que son triomphe se lie étroitement à la domination d'un peuple, ou d'une race, la race Arabe. C'est à cause de cela qu'il s'est propagé dès l'origine par les armes, et que ses succès ultérieurs ont toujours eu l'apparence d'une conquête. Une religion universelle, qui a la prétention de se faire accepter par tous les hommes ne peut pas attacher son existence et ses progrès aux triomphes de la force, parce que la supériorité constante, indéfinie d'un peuple sur tous les autres est une chimère et une impossibilité, que les succès de la force sont nécessairement variables, et qu'une cause destinée à gagner le genre humain doit raisonnablement établir sur d'autres fondements son existence et sa grandeur.

Cependant l'expérience démontre que la persuasion toute seule, bien qu'elle fût le moyen réel et avoué, employé par les religions qui aspirent à l'universalité, n'a jamais suffi pour assurer leur établissement, et que la force a toujours concouru à leurs progrès. Le triomphe du Christianisme aux premiers siècles n'a été décidé que le jour où Constantin, le prince, le chef de l'empire, en devenant Chrétien, fit de sa nouvelle religion la religion officielle, celle de l'état romain. Nous savons ce qu'ont fait les missionnaires Anglo-Saxons pour rendre les Germains Chrétiens, mais nous savons trop aussi ce qu'a fait l'épée de Charlemagne. Pendant tout le moyen-âge, les conducteurs de l'Église n'ont pas pu remplir leur mission sans le secours du bras séculier, c'est-à-dire de la force. Lors de la Réforme du XVIe siècle, l'adhésion ou l'hostilité des princes a eu une part considérable dans l'adoption des principes nouveaux ou dans la conservation des usages établis ; et nous voyons constamment, dans l'histoire de l'église chrétienne, la force appuyer et quelquefois remplacer la persuasion.

Le Bouddhisme, à certains égards, semble plus ennemi encore de la violence que le Christianisme :[1] Car jamais on n'a vu les disciples de Çâkyamouni manier l'épée comme les princes de l'église et les abbés du

[1] Le Christianisme est très pacifique par lui-même ; mais les Chrétiens ne le sont pas toujours.

moyen-âge, unir systématiquement la religion et la guerre comme les ordres religieux et militaires fondés en Terre-Sainte, ou tomber sur un champ de bataille comme le réformateur Zwingli ; le Bouddhisme, malgré cela, a profité du secours de la force. La tradition ne nous montre-t-elle pas Çâkyamuni protégé par des rois tels que Bimbisára et Prasenajit? Plus tard la puissance de rois et de conquérants célèbres, tels que Açoka et Kanishka, contribuèrent à asseoir le Bouddhisme dans la Péninsule indienne. Au dehors de l'Inde, au Tibet, en Chine, le Bouddhisme ne fut accepté et ne s'acclimata qu'après des luttes longues et pénibles ; il prospérait sous les princes qui l'appuyaient, il déclinait et parfois disparaissait sous les princes qui se déclaraient contre lui. On ne peut donc pas dire que la persuasion seule ait fait son succès, et il faut bien avouer que la force a contribué pour une large part à sa propagation.

Mais s'il est nécessaire de constater cette intervention de la force, gardons-nous d'en exagérer l'importance, et n'allons pas jusqu'à nier ou diminuer outre mesure le rôle de la persuasion. De quelque autorité que disposent les dynasties et les princes, leur puissance a des limites. Sans doute, ils réussissent trop souvent à prévaloir contre le vœu des peuples et à imposer leur volonté personnelle ; mais ils subissent ordinairement l'influence du milieu dans lequel ils s'agitent, et souvent, croyant faire ce qui leur plaît à eux-mêmes, ils font ce qui plaît au grand nombre et exécutent la pensée de tous. Dans les affaires religieuses surtout, dans celles où la conscience, c'est-à-dire ce qu'il y a de plus libre et de plus personnel dans l'homme, est particulièrement intéressée, il existe, entre la ligne généralement suivie par le prince et les aspirations du peuple, une certaine harmonie, une entente tacite qui permet de considérer le résultat définitif comme l'expression de la volonté nationale, quels qu'aient pu être, dans une foule de circonstances, les abus de la force, les violences du pouvoir arbitraire et les écarts des volontés individuelles. Il y a là une question très difficile, très délicate, très complexe, qu'on ne peut pas résoudre ou plutôt trancher d'une manière générale, et qui exigerait pour tous les cas particuliers un examen sérieux et approfondi. Nous renfermant ici dans celui qui nous est soumis, la propagation du Bouddhisme, question encore fort vaste, puisque, si l'on veut être complet, il faut l'étudier séparément pour chacun des peuples où il a pénétré, nous croyons pouvoir affirmer que le rôle de la persua-

sion a été plus considérable que celui de la force dans le développement géographique de cette religion. Nous n'avons par la prétention d'étudier dans tous ses détails une question si vaste et si multiple; nous ne chercherons pas à déterminer avec précision la part de la force et celle de la persuasion dans la propagation du Bouddhisme, ou le caractère propre qu'elle a revêtu chez chacun des peuples qui l'ont reçu; s'il nous arrive de toucher à ces points délicats, ce ne sera que par hasard et en passant. Notre intention est uniquement de chercher à déterminer les causes de la séduction que le Bouddhisme a pu exercer d'une manière générale sur les peuples non-âryens, en un mot, les causes morales qui l'ont fait librement accepter par les peuples chez lesquels il domine.

II.

Au premier rang des motifs qui ont entraîné la persuasion, il faut placer la vie exemplaire du Bouddha Çâkyamouni. "S'il avait été Chrétien," dit Marco-Polo, "il eût été un grand saint avec notre Seigneur Jésus-Christ." Si un chrétien du temps des Croisades a été ainsi frappé par la vie de Çâkyamouni, quelle n'a pas dû être l'impression faite par cette vie sur des peuples non chrétiens, la plupart ignorants et grossiers! Du reste, quand Marco-Polo exprime son admiration pour le Bouddha, il n'est que l'écho des Bouddhistes au milieu desquels il passa un partie de sa vie. Il est donc juste d'accorder une grande influence à la *vie* du fondateur du Bouddhisme, telle que les livres canoniques de cette religion nous la font connaître.

Mais on sait que l'existence de Çâkyamouni n'est pas renfermée dans les étroites limites d'une seule vie, que, d'après les données bouddhiques, il a vécu mainte et mainte fois, donnant, dans chacune de ses apparitions, les plus beaux exemples (quoique souvent fort extravagants) de moralité et de dévoûment. Quand M. Bergmann était chez les Kalmuks du Volga, la fille du chef lui demanda un jour s'il pouvait lire sans pleurer le Mahâ-Vessantara.[1] Ce texte est connu par l'analyse qu'en a donnée M. Spence Hardy;[2] c'est le récit de

[1] "Ob er den Uschandarchan ohne Thränen lesen könne," cité par Köppen (Die Religion des Buddha, p. 326, note)—Pallegoix raconte que, à Siam, les talapoins racontent tous les jours l'histoire de Vetsandou (Vessantara) au peuple, et font couler les larmes des yeux de leurs auditeurs (Déscription du Royaume Thai ou Siam, vol. ii. p. 3).

[2] A Manual of Buddhism, pp. 116-124.

l'avant-dernière existence du Bouddha Çâkyamouni, qui sacrifie successivement pour le bien des autres sa royauté, son bien-être, ses enfants, sa femme. Voilà certes un motif de persuasion puissant, irrésistible : il y a des légendes bouddhiques, des histoires du Bouddha qu'on ne peut lire *sans pleurer*.

Nous faisons une distinction entre la dernière vie du Bouddha qui a une base historique et toutes ses vies antérieures qui sont purement fabuleuses; mais cette distinction, les Bouddhistes ne la font pas; pour eux, l'existence du Bouddha est *une* avec un grand nombre de phases diverses. Et ce n'est pas là une particularité qui soit propre à Çâkyamouni. Une foule de personnages bouddhiques ont ainsi leur histoire embrassant une longue série de siècles et de vies successives; les bouddhistes peuvent savoir ce que fut, à telle ou telle époque, tel ou tel personnage éminent de leurs annales religieuses; et ils le savent par des révélations du Bouddha. Le système a même été appliqué à des personnages qui ont vécu depuis la fondation du Bouddhisme; non seulement leur passé est expliqué, mais leur avenir est dévoilé. Cette science divinatoire du passé et du futur, qui joue un si grand rôle dans la littérature bouddhique, les récits plus ou moins frappants qui l'établissent ont dû nécessairement exercer une grande influence. Si nous joignons à cette prétendue science les prodiges et les faits merveilleux qui l'accompagnent et en sont la conséquence, puisque, selon les idées bouddhiques, la science produit la puissance, on devine aisément quelle impression ce déploiement de surnaturel a du faire sur les esprits. La *science* et la *puissance merveilleuse* dont le Bouddhisme se vante de posséder le secret et qu'il enseigne ou expose avec une singulière précision de détails peut donc, à bon droit, être considérée comme une des causes les plus actives de sa propagation.

Et cependant ce *merveilleux* n'a peut-être pas eu autant de crédit sur les âmes que la *moralité* par laquelle le Bouddhisme se distingue. C'est à la moralité que tout revient, c'est de la moralité que tout dépend dans l'enseignement de Çâkyamouni. Cette science qui donne un pouvoir surnaturel n'est autre que la science du bien; tous ces récits des existences successives du Bouddha et des autres personnages n'ont de raison d'être, de base, que dans la morale. La doctrine de la transmigration des âmes n'a pas seulement séduit les imaginations par les récits plus ou moins touchants qui servent à l'expliquer, ou par l'apparence de science divinatoire qu'elle suppose, elle a

aussi touché et surtout gagné les cœurs par la satisfaction donnée au sentiment moral. Tout est en effet calculé à montrer le rapport nécessaire qui existe entre le bien moral et le bonheur extérieur, entre le mal moral et le malheur : c'est une sorte de morale en action qui montre constamment toute bonne œuvre récompensée, toute mauvaise œuvre punie, le bonheur s'acquérant par l'effort continu de la vertu, le vice, et par tant l'infortune, ne disparaissant que par une série d'expiations et une lutte persévérante contre le mal. On peut dire que le Bouddhisme est une religion essentiellement morale, en ce sens que l'élément moral y domine de bien haut toute autre genre de considérations. La doctrine de la transmigration des âmes, expression la plus complète et la plus facile à comprendre de la pensée morale du Bouddhisme, lui a conquis les âmes. Ce ne sont pas les savantes discussions sur le *moi*, sur le *vide*, sur le *Nirvâna*, qui ont fait le succès de l'œuvre de Çâkyamouni. Tout au plus ont-elles contribué à donner une haute idée de la profondeur d'esprit des savants qui s'y livraient; elles n'ont pas entraîné les foules; et si le Bouddhisme n'avait pas eu d'autres moyens de persuasion, il serait demeuré une simple école de philosophie. La doctrine de la transmigration des âmes au contraire, doctrine simple et facile à saisir, explication claire et satisfaisante en apparence des contradictions et des mystères de la destinée humaine, semblait faire aux évènements de la vie une juste application des principes de la morale naturelle; dès lors, elle avait tout ce qu'il fallait pour devenir populaire. En faisant aisément son chemin dans les esprits à l'aide des narrations qui la rendent si intelligible, elle a contribué, plus qu'aucun autre point de la doctrine, à faire accepter le Bouddhisme dont elle fut et sera toujours le dogme fondamental.

Nous avons énuméré trois causes qui ont agi sur les esprits: 1° les faits de la vie historique et légendaire du Bouddha;—2° la science du passé et de l'avenir, et le secret du pouvoir surnaturel que le Bouddhisme attribue à ses plus éminents adeptes;—3° la doctrine de la transmigration et la sanction morale dont elle est la garantie et l'instrument tout à la fois. Il résulte de cette simple énumération, et des observations précédentes, que ces trois causes sont connexes, qu'elles rentrent les unes dans les autres, que la dernière est la principale et, pour ainsi-dire, la seule; car la transmigration des âmes les résume toutes; et nous insistons de nouveau sur l'influence immense

que cette théorie, si bien expliquée et commentée par toute la littérature bouddhique, a dû exercer. En ouvrant à l'activité des êtres un champ immense, en facilitant le relèvement de toutes les déchéances, en jetant aux plus hautes fortunes la menace d'une chute rédoutable, elle encourage toutes les espérances, adoucit toutes les calamités, fait appel à la conscience, entretient les meilleurs sentiments, combat les plus mauvaises tendances, et semble offrir la meilleure solution des plus accablantes difficultés.

III.

Après l'influence capitale de la doctrine, celle de la constitution de la société bouddhique a une grande place. La société bouddhique n'est autre chose, on le sait, qu'une confrérie de moines. Les laïques sont seulement tenus d'adhérer à cinq préceptes moraux, que nul homme de bien ne peut rejeter, et de rendre à la personne et à l'œuvre du Bouddha un hommage peu compromettant. Le plus grand sacrifice qu'on exige d'eux consiste dans l'obligation de nourrir les moines; il est considérable, à la vérité, et le système religieux qui fait vivre aux dépens du public, de la société générale, une société particulière de mendiants, est un lourd fardeau pour la population, blesse une foule d'intérêts privés, en même temps qu'il choque la raison et la justice. Mais nous pouvons comprendre aisément qu'il ait réussi en Asie, puisque nous voyons qu'il a fleuri longtemps en Europe. Le monachisme, en effet, peut réussir à certaines époques et chez certaines races; ces hommes qui paraissent renoncer à tous les avantages de la vie ordinaire, qui étonnent par une existence si étrange, et par une sainteté plus ou moins réelle, mais étalée avec ostentation devant le public, impriment le respect à la foule. Si, dès le principe, comme il arrive toujours, l'institution monastique se distingue par la sincérité, la conviction, la vertu de ceux qui en sont membres, elle peut s'assurer pour longtemps une grande vénération. Or, il n'est pas douteux que Çâkyamouni a eu un grand nombre de disciples convaincus et respectables jusque dans leur extravagance. Aujourd'hui encore, malgré des abus scandaleux, malgré la fainéantise et l'indignité du plus grand nombre des moines, il en est qui se distinguent par l'observation rigoureuse des règles de leur ordre. D'ailleurs les mérites garantis par les livres religieux

aux laïques qui pratiquent le *don*, le sentiment que ces laïques ont besoin de racheter leurs fautes par des offrandes coûteuses, la liberté que la religion leur laisse en dehors de l'accomplissement de ce devoir et des autres conditions peu nombreuses qu'elle leur impose, sont autant de motifs qui les invitent à supporter la société monastique. Les services que les moines rendent en répandant avec une certaine libéralité une instruction très insuffisante, mais préférable à l'ignorance absolue, ajoutent encore à l'intérêt que leur situation et la tradition leur assurent. On peut donc avancer sans crainte la proposition que la *constitution de la société monastique* a considérablement secondé les progrès du Bouddhisme. Les moines sont rendus respectables par la règle sévère qui leur est imposée, et les laïques ne sont pas rebutés par des observances multiples et gênantes.

IV.

L'état social des peuples qui ont reçu le Bouddhisme, comparé à celui du peuple qui le leur a envoyé, est aussi un important élément d'appréciation, lorsqu'on veut se rendre compte des succès du Bouddhisme; mais ici on ne peut plus parler d'une manière générale; il y a des distinctions à faire. L'état social n'était pas le même partout; et ces diversités, en créant aux missionnaires bouddhistes des situations différentes, ont également diversifié la nature de l'influence qu'exigeait le succès de leur entreprise.

La plupart de ces peuples étaient, avant leur conversion, dans un *état de barbarie* plus ou moins complet, dont le Bouddhisme seul les fit sortir. Ceylon, l'Indo-Chine, le Tibet furent dans ce cas. Pour ces pays, l'histoire commence avec l'introduction du Bouddhisme; avant que le nom de Çâkyamouni fût porté aux tribus qui les habitaient, ces tribus ne comptaient pas parmi les nations. Le Bouddhisme les dégrossit, les éclaira, les civilisa, leur donna une existence nationale; les missionnaires indiens apparurent à ces peuples enfants et ignorants comme des hommes supérieurs, des instituteurs et des initiateurs. Après avoir subi à l'origine l'ascendant des missionnaires venus du dehors, ces peuples ont naturellement conservé avec respect l'enseignement religieux qu'ils en avaient reçu.

Ce qui vient d'être dit ne saurait s'appliquer aux Mongols, sans restriction. Féroces, grossiers, absolument incultes, il est vrai, les Mongols étaient cependant parvenus en peu d'années de l'obscurité la plus complète à la plus haute fortune, ils avaient subjugué de nombreux pays et surtout un grand empire jouissant d'une antique et florissante civilisation, quand le choix du prince leur fit adopter le Bouddhisme. Des *considérations politiques* paraissent avoir été le principal motif de ce changement; le peuple ne fit guères autre chose que suivre docilement et servilement la voie tracée par son souverain; et si l'introduction du Bouddhisme parmi les Mongols se réduisait à ce seul fait, accompli sous le règne de Koubilaï-Khan, il serait impossible de l'expliquer par l'impression sérieuse et profonde que la religion aurait faite sur les esprits. Mais l'œuvre du petit-fils de Gengis-Khan ne fut pas durable; après la chute de leur vaste domination, les Mongols, rentrés dans l'obscurité, perdirent la religion qui leur avait été donnée au temps de leur grandeur. Cependant, ils revinrent au Bouddhisme par la suite, et l'acceptèrent alors dans des conditions tout à fait nouvelles, en vertu d'un choix plus libre. L'influence du clergé tibétain fut prépondérante dans ce mouvement de retour; et l'on peut dire que la seconde introduction du Bouddhisme parmi les Mongols a quelque analogie avec l'établissement de cette religion chez les peuples barbares qui n'en avaient jamais entendu parler. Mais s'il y a analogie, il n'y a pas parité; car le souvenir de ce qui s'était fait sous Koubilaï n'était pas absolument perdu, et dès lors on ne peut comparer entre eux ces deux évènements qu'en faisant certaines réserves.

À plus forte raison devra-t-on en faire, s'il s'agit de l'introduction du Bouddhisme du Chine. Ce fut là certainement le plus singulier épisode de sa propagation. En Chine, les missionnaires bouddhistes se trouvaient en face, non plus de tribus grossières, ignorantes, sauvages, mais bien d'un peuple constitué depuis longtemps en nation régulière, possesseur d'une civilisation très ancienne, chez qui la science et l'étude étaient en honneur. Il était relativement facile de gagner des populations barbares, incultes, en état d'enfance, auxquelles on apportait l'écriture, dont on perfectionnait la langue, dont on polissait les mœurs qu'on appelait en quelque sorte à une vie nouvelle; il était bien plus ardu de faire accepter des doctrines et des institutions étrangères à une nation civilisée, dont l'intelligence

était cultivée depuis longtemps, qui avait une littérature déjà fort étendue, et qui pouvait opposer aux discours de Çâkyamouni les œuvres d'un Lao-tseu et d'un Confucius. Mais précisément le crédit dont jouissait l'écrivain le plus distingué de la Chine, Confucius, fut, selon toutes les apparences, ce qui favorisa le mieux l'introduction du Bouddhisme. Confucius et son école avaient tellement réduit la part de l'élément religieux dans leur enseignement qu'on y sentait une véritable lacune; aussi la porte était-elle ouverte à toute doctrine qui saurait contenter les besoins des âmes auxquels l'école officielle ne donnait qu'une satisfaction incomplète. Le Bouddhisme entra par cette porte: ses récits *merveilleux* frappèrent les esprits avides de nouveauté, conquirent la popularité, et remplacèrent les enseignements purement moraux et philosophiques de Confucius, ou, du moins, ils se firent une large place à côté de cet enseignement. Les lettrés restèrent fidèles à la littérature et à la philosophie nationale; la masse du peuple accepta les enseignements de l'étranger et se laissa séduire par l'austerité des "fils de Çâkya." Ainsi le Bouddhisme gagnait la population tout entière dans les pays barbares, et les classes inférieures dans les pays civilisés, résultat facile à prévoir qui donne à son œuvre de propagation une physiognomie générale et uniforme, mais avec des différences de détail qu'il n'est pas permis de négliger.

V.

Un dernier trait nous reste à signaler parmi les causes qui ont dû assurer le succès du Bouddhisme,—c'est sa flexibilité. Le Bouddhisme est pourtant une religion controversiste au plus haut degré; et néanmoins, il sait tempérer cette ardeur par un remarquable esprit de tolérance et de justice. Les disciples de Çâkya enseignent leur doctrine, proposent leurs institutions, se vantent publiquement de posséder la vérité; mais ils ne condamnent formellement aucun culte. Même dans leur lutte contre leurs adversaires naturels, les brahmanes, ils étaient loin de proscrire le parti opposé: ils s'élevaient bien contre certaines théories, ils montraient l'inanité de certaines pratiques; mais ils supportaient la contradiction, et surtout ils avaient l'art d'emprunter à l'adversaire tout ce qui n'était pas absolument contraire à leur propre enseignement. Ainsi tous les dieux du Brahmanisme figurent dans leurs légendes; ils y

sont, à la vérité, subalternisés, travestis, revêtus du costume bouddhique, mais ils ne sont pas exclus; les Indiens qui accordaient leur adhésion à l'œuvre de Çâkya n'étaient donc pas contraints à rejeter totalement les objets primitifs de leur adoration et à rompre tout à fait avec leurs traditions et leurs usages. Ce que le Bouddhisme avait fait dans l'Inde à l'égard des croyances brahmaniques, il le fit dans les autres pays à l'égard des idées religieuses qu'il y trouvait. De là vient qu'on rencontre chez tous les peuples bouddhistes une foule de pratiques et de croyances qui n'ont rien de bouddhique par le fond et par l'origine, mais que le Bouddhisme a tolérées, quelquefois même adoptées, en leur faisant subir dans la forme quelques modifications qui les mettent mieux en harmonie avec la religion dominante. Il n'est pas douteux que cette politique habile et heureuse a altéré la pureté du Bouddhisme, et qu'il y a une grande différence entre le Bouddhisme idéal des livres sacrés, et le Bouddhisme pratique des différents peuples. C'est là le résultat presque inévitable de la propagation d'une religion qui prétend à l'universalité. Le christianisme, bien moins tolérant que le Bouddhisme, bien plus implacable contre l'erreur, a dû parfois user, peut-être à son insu, d'une flexibilité pareille, et il n'a dû sa large diffusion au moyen-âge, et même dès les premiers siècles, qu'à la facilité avec laquelle, il a laissé subsister et a adopté même une foule de pratiques et de croyances païennes. Le Bouddhisme, s'il avait été dans son génie de condamner et d'anathématiser tout ce qui s'écartait de la pureté de sa doctrine, eût toujours été forcé de faire des concessions aux superstitions populaires; à plus forte raison, a-t-il dû être poussé à ces concessions par la modération qui le caractérise, par le remarquable esprit de tolérance qui, dès l'origine, en a fait une religion de controverse reconnaissant à la cause opposée le droit d'exister, plutôt qu'une religion d'autorité affirmant la vérité et anathématisant l'erreur. Les peuples auxquels on proposait une religion nouvelle sans leur demander le sacrifice complet de ce qu'ils étaient accoutumés jusque là à croire et à respecter, n'avaient aucun motif de résister avec obstination à des innovations si pacifiques; ils étaient ainsi disposés dès l'abord à écouter les récits merveilleux des actions du Bouddha, à recevoir à la fois ses enseignements et sa confrérie.

En résumé, les motifs qui ont persuadé les peuples et les ont décidés

à accueillir le Bouddhisme peuvent se classer sous quatre chefs principaux.

1° Le caractère merveilleux et surtout moral des récits par lesquels le Bouddhisme appuie ses enseignements et, en particulier, sa doctrine fondamentale de la transmigration des âmes.

2° La simplicité de la règle fixée pour les laïques, et la sévérité de celle qui est imposée aux moines, combinaison qui laisse aux premiers plus de liberté, et rend les seconds plus respectables.

3° L'état d'infériorité sociale ou les lacunes de l'enseignement religieux chez les peuples qui ont accueilli le Bouddhisme, et qui, par les circonstances mêmes, étaient prédisposés en sa faveur.

4° Les procédés habiles et modérés du Bouddhisme à l'égard des croyances ou des pratiques religieuses des autres peuples.

Parmi ces causes d'un ordre différent, quelques unes ont pu agir avec une intensité particulière chez tel ou tel peuple; et c'est á démêler la part prépondérante d'influence exercée par l'une ou l'autre que l'histoire complète, minutieuse, détaillée de la propagation du Bouddhisme devra s'appliquer; mais toutes ces causes ont agi avec plus ou moins de puissance, et cela naturellement, par leur propre vertu, indépendamment de la pression exercée par certains hommes et surtout par les princes.

PROCEEDINGS.

MEETINGS.

SEPT. 14.—INAUGURAL MEETING. Royal Institution, 21, Albemarle Street.

President: S. BIRCH, LL.D., F.S.A. *Hon. Secretaries:* Prof. ROBERT K. DOUGLAS, M.R.A.S.; W. R. COOPER.

SEPT. 15.—SEMITIC SECTION. Rooms of the Royal Society of Literature, 4, St. Martin's Place, Charing Cross.

President: Sir HENRY RAWLINSON, K.C.B., F.R.S., M.R.A.S. *Secretary:* W. S. W. VAUX, F.R.S.

SEPT. 16.—TURANIAN SECTION. King's College, Strand.

President: Sir WALTER ELLIOT, K.C.S.I., M.R.A.S. *Secretary:* Prof. DOUGLAS, M.R.A.S.

SEPT. 17.—ARYAN SECTION. Royal Institution, 21, Albemarle Street.

President: Prof. MAX MÜLLER, M.A., LL.D., M.R.A.S. *Secretary:* Prof. EGGELING.

SEPT. 17.—HAMITIC SECTION. Rooms of the Society of Biblical Archæology, 9, Conduit Street.

President: S. BIRCH, LL.D., F.S.A. *Secretary:* W. R. COOPER.

SEPT. 18.—ARCHÆOLOGICAL SECTION. Royal Institution, 21, Albemarle Street.

President: M. E. GRANT DUFF, M.P., M.R.A.S. *Secretary:* E. THOMAS, F.R.S., M.R.A.S.

SEPT. 19.—ETHNOLOGICAL SECTION. Royal Institution, 21, Albemarle Street.

President: Prof. R. OWEN, C.B. *Secretary:* R. CULL, F.S.A.

Meeting to decide where the Third International Congress of Orientalists is to be held, and to nominate its President.

PROCEEDINGS OF THE SECOND SESSION

OF THE

INTERNATIONAL

CONGRESS OF ORIENTALISTS,

LONDON.

On Monday, the 14th of September, the Second, or London "International Congress of Orientalists," commenced its sittings under the Presidency of Dr. Samuel Birch, Keeper of the Oriental Antiquities in the British Museum. The first meeting of the Congress took place in the evening, at 8·30, in the Rooms of the Royal Institution, 21, Albemarle Street, Piccadilly; when the President commenced the proceedings by reading his Opening Address.

During the proceedings Professor Albrecht Weber received the following telegram from that distinguished Orientalist, Professor Ascoli, of Milan, who was appointed Italian Delegate to the London Congress of Orientalists:

London.—*From Milan*, Sept. 13. Au Professeur Albrecht Weber, *au Congrès des Orientalistes par bonté de* Messrs. Trübner & Co., 57 & 59, *Ludgate Hill, London.*

Il reale ministero Italiano della pubblica istruzione mi ha incaricato

di assistere nella mia qualità di cultore degli studi linguistici orientali a codesto congresso. Mi duole che impedimenti insuperabili mi vietino di obbedire all' onorevole incarico, e intanto mi permetto di avanzare i miei rispettosi saluti ed auguri al congresso, e di assicurare gli onorevoli suoi membri che se l'Italia sarà scelta la sede della futura riunione le autorità e i privati andranno certamente lieti di manifestarne la loro contentezza nel miglior modo che per loro si potrà.

G. D. Ascoli,

Preside della Reale Academia Scientifico-Letteraria di Milano.

At the conclusion of the President's Address, Professor Léon de Rosny, the President of the First Congress (Paris), and Delegate to the London Congress, delivered the following speech:

Monsieur le President, Messieurs et Savants collegues,—Il m'appartient, comme Président de la première Session du Congrès International des Orientalistes, de remercier publiquement l'illustre Président de cette Assemblée et tous les Membres du Comité central d'organisation, du zèle éclairé, du dévouement incessant avec lequel ils ont mené à bonne fin les préparatifs de cette seconde Session.

Lorsque les Délégués de tous les Pays de l'Europe ont proposé au Congrès de Paris, de confier à la docte Angleterre le soin de poursuivre l'œuvre inauguré en France, ils n'ont point douté un seul instant que, dans la grande métropole de la glorieuse Albion, cette œuvre serait continuée de la façon la plus brillante et la plus fructueuse pour le progrès de nos études.

Les Congrès scientifiques internationaux sont appelés, je crois, à signaler une ère nouvelle pour le progrès des Sciences et des Lettres.

Ces Congrès réunissent en effet des conditions de succès qu'il serait difficile, pour ne pas dire impossible, de rencontrer dans tout autre genre d'association. Prévenus une année à l'avance, les savants du monde entier, convoqués à ces grandes assises de l'érudition et de la pensée, préparent à loisir leurs meilleurs travaux, mûrissent leurs idées, complètent leurs découvertes; et lorsque le jour de la Réunion est arrivé, ils savent que le résultat de leurs efforts et de leur intelligence, sera simultanément apprécié, par les juges les plus autorisés de toutes les nations civilisées. Ils savent en effet que la grand publicité, —que la science n'a pas toujours raison de dédaigner,—fera connaître leurs services tous les hommes amis des travaux de l'esprit.

Mais là n'est pas seulement l'utilité de ces Réunions internationales.

Leur plus beau titre à la sympathie des hommes honnêtes, est certainement d'apprendre aux nations à se connaître, à s'encourager, à s'estimer mutuellement.

Au Congrès de Paris, le Délégué de votre grande cité, nous disait en termes qui ont ému tous les cœurs français, que l'Angleterre, en ambitionnant l'honneur de tenir la seconde Session dans sa capitale, devait nous rappeler que l'Angleterre avait toujours tenu à marcher a côté de la France dans les voies de la Justice et de la Civilisation.

Permettez-moi d'ajouter à mon tour, qu'en nous offrant aujourd'hui la plus gracieuse, la plus courtoise des hospitalités l'Angleterre nous fournit l'occasion de constater que sur le terrain neutre de la science, il ne saurait naître dans le cœur d'aucun savant d'autres sentiments que ceux d'une cordiale estime, pour quiconque s'efforce d'arracher une vérité au vaste domaine de l'inconnu.

Mr. Shankar Pandurang Pandit, who was commissioned by Lord Northbrook to represent the Indian Empire at the Congress, also made a short speech expressive of gratitude for the kindness and hospitality with which he had been received in England.

Tuesday, September 15.

The members of the International Congress of Orientalists met in the British Museum at ten o'clock, Dr. Birch and other officers of the institution doing the honours on the occasion. The proceedings were of an informal character.

At 2·30 P.M. the Orientalists assembled in the Rooms of the Royal Society of Literature, 4, St. Martin's Place, Trafalgar Square, where the meeting of the Semitic Section was to take place; but the smallness of the space, which would only accommodate about 80 persons, necessitated the adjournment of the meeting to the Royal Institution, 21, Albemarle Street, after the proceedings had already commenced.

Sir Henry Rawlinson, K.C.B., opened the Section with an address: after which Professor Oppert addressed the meeting in French on the Median Dynasty.

On the conclusion of Professor Oppert's Address, Professor Schrader,

of Jena, rose at the call of the President of the Section, and made a few critical remarks in German on the theories advanced by his learned colleague. In the course of his reply he objected to the theories of Prof. Oppert, firstly, that the Turanian character of the second kind of Cuneiform Inscriptions, and of the so-called Accadian language of old Babylonia, was not certain, and that it would be best to avoid this name in order to prevent misunderstanding; secondly, that there is not sufficient ground to believe that the language of the second kind of Cuneiform Inscriptions is of the same origin as the language of the proto-Chaldeans or the Accadians; thirdly, that the evidence in support of the view that the names of Ctesias are the Persian translation of the so-called Turanian names of Herodotus is not given by Dr. Oppert, and that it is on the whole very improbable that the Persians had given such a translation of Median names. It would be hard to find an analogy in history of such a translation of names.

Then examining Professor Oppert's chronological views, Professor Schrader, who said that he had nothing to object to Professor Oppert's explanation of the passage of Sargon, added that he dared not pronounce a decisive judgment before the Congress upon the theories of Professor Oppert relating to the cyclical numbers of Berosus, because he is not in a position to examine the calculations of which Professor Oppert gives only the results; but he would not conceal his doubt that the origin of the cyclical numbers of Berosus is to be found in such a combination of the Sothiac and Lunar periods, as Professor Oppert supposes. Professor Schrader concluded that it may be as Professor Oppert maintains; but he added that there is not sufficient ground to assert that it is as Professor Oppert supposes. Further examinations and investigations may, he thought, throw light upon the subject.

Professor Schrader was followed in French by M. le Baron Textor de Ravisi.

Professor Schrader was, on account of the lateness of the hour, compelled to give up the idea of reading an essay prepared by him, on the Transliteration of the Cuneiform Character of the Assyrian Syllabary into Roman Letters, which will shortly be published.

A paper on the First Person of Dr. Hincks's Permansive Tense in Assyrian terminating in *-Ku*, was taken as read; and, after some re-

marks by the President, announcing a fresh discovery of an inscription, supposed to be Carian, at Ephesus, the Section closed its session with a vote of thanks to the President.

Wednesday, September 16.

On Wednesday morning, at eleven o'clock, Sir Bartle Frere, President of the Royal Asiatic Society, and Lady Frere received the members of the International Oriental Congress at their residence, Wressil Lodge, Wimbledon Common; and later in the day (from two to six P.M.) Dr. Hooker received the members of the Congress at his residence, Kew Gardens.

The evening meeting, at 8·30, was devoted to the Turanian Languages. The Section was opened in the theatre of King's College by an Address by the President, Sir Walter Elliot, K.C.S.I.

Professor Hunfalvy then read a paper, in which he showed by numerous facts adduced from Hungarian, Wogul, Ostiak, and Finnish, that the established notion of Turanianism seems to be not well founded, and that it leads students into many errors. He endeavoured to show, consequently, that the same genealogical method of studying which has created the Aryan and Semitic linguistic science must also be applied to the Turanian languages, and that before such a perfect science can be formed every comparative study of them must be unavailing.

During the sitting of this Section M. le Baron Textor de Ravisi made some remarks, of which the following is a resumé:

Le Têmbâvani.—Le très-honorable Président de la Section touranienne, Sir Walter Elliot, ayant été l'heureux et digne possesseur du manuscrit original du grand poëme Hindou le *Têmbâvani* (il en a fait don à la Bibliothèque au département des Indes), le Baron Textor de Ravisi, ancien gouverneur de la colonie française dans l'Inde, fait part au Congrès du compte-rendu analytique de ce poëme. Il figurera dans les Mémoires des Travaux du Congrès sous le nom de M. Julien Vinson, jeune dravidiste français qui a fait des études dans l'Inde.

Le Têmbâvani ce chef-d'œuvre de la littérature sud de l'Inde a pour auteur le R. P. Beschi, qui vivait au dernier siècle.

Importance des études dravidiennes.—M. de Ravisi expose que la langue *Tamoule* est digne de l'attention de la science orientaliste. Rendue langue savante, par son Sanscritisme, elle présente la bonne fortune pour la science d'avoir survécu au Sanscrit. Si l'étude du Tamoul doit être encouragée en France, parceque Pondichéry et Karikal sont des colonies françaises, *à fortiori* doit elle l'être en Angleterre, puisque 40 millions de ses sujets parlent les dialectes dravidiques, et que le Tamoul en est la langue mère. L'Angleterre compte dans ses orientalistes les dravidistes les plus distingués que nous ayons.

A paper was then read by the Rev. Isaac Taylor, on the Relations of the Etruscan and Accadian Languages.

At the conclusion of the Rev. Isaac Taylor's paper, Professor Leitner made the following remarks:

I think this Section deserves to be congratulated on having done what was omitted in the Semitic Section yesterday. We have, in the papers that have been read, especially in the able communication of Professor Hunfalvy, an indication of the present state of Turanian studies, as well as hints for placing them on the same systematic and prominent footing which the "Aryan" scholars have secured for their subject and themselves. That, in what alone can properly be called "Turanian," viz. the Turki group, a harmony of the vowels exists in the agglutinated syllables, may be confirmed by such instances as *baq* = 'see;' *baqmaq* = 'to see;' *baqmamaq* = 'not to see;' *baqamamaq* = 'not to be able to see;' and, again, in such a sentence as *görüshemediksekdé unudulmadi sevdamiz* = 'although we have not been able to meet for a long time, yet have our mutual loves not been forgotten.' Still, all this is merely suggestive for future studies in that and kindred groups, and is by no means *exclusive* of the comparative method so successfully applied in the Aryan inquiries. At present, whatever we know little or nothing about, we call "Turanian," although that term has a special and exclusive significance, to which it applies admirably, but beyond which it is altogether misleading, and, indeed, obstructive to accurate and increased classification. It is true that in this Section we have outlived the stage when *atesh* = 'fire' was derived from English 'hot ash;' but Turanians are still in that peculiar stage of great learning which existed in another direction, when German was derived from Latin, and Latin from

Hebrew; and we have yet to reach the third and highest stage, that of positive and accurate knowledge. Thus, Etruscan, which a common mortal might deem an Italic dialect, is, by dint of excessive learning, made Turanian; although we have only some thirty words out of which to evolve a mythology and language, and not, as might be anticipated from such noble conjectures as we have heard, a whole literature on which to base them, and which, as Mr. Cull states, exists for Finnish. The charms of "Turanian," however, are so great as to engage, as we admired yesterday, even the attention of other Sections. Acting with greater strictness, I venture to submit to this Section the vocabulary and inflections of a language which does not belong to any of the known groups, viz. the Khajuná (the language of Hunza and Nagyr), and which, therefore, rightly has to go before this Section. In it, the transition of gutturals to vowels, or from a more animal to a more human form of speech (if I may be allowed these terms), still goes on, as evidenced by the speech of the lower classes, when contrasted with that of their chiefs, e.g. *akhatt* and *gokhatt* for 'mouth.' Speaking in a very popular way, a language belonging to the Aryan group is recognized by the application of scientific rules to the changes of a root, traceable from a conventional centre, for, whatever may be the changes, they can be marked with precision, however affected the root may be by different histories and migrations—the Semitic languages may be ascertained by the wonderfully logical developments from a triliteral root, and are confined in area—the Turanian, what there is of it, by the harmonious agglutination of syllables; but to this group Etruscan does *not* belong, nor, possibly, for that matter, the second Medic series, with the second persons plural yet to be discovered in all the tenses.

The Rev. Joseph Edkins, D.D., of Peking, next read a paper on the Chinese Language at the Time of the Invention of Writing.

Mr. Edkins was followed by Professor Léon de Rosny, who read a paper on the most Ancient Chinese Palæography, and to him succeeded the Rev. Samuel Beal, B.A., who addressed the meeting on the Results of an Examination of Chinese Buddhist Books in the Library of the India Office.

THURSDAY, SEPTEMBER 17.

The Congress of Orientalists assembled at the Soane Museum at ten A.M., and afterwards, at twelve o'clock noon, in the Library of the India Office; and from three o'clock to six in the afternoon Dr. Birch gave an "at home" at his official residence in the British Museum. During the morning Dr. Birch received from the French Embassy the Order of the Golden Palms ("Palmes d'Or"), with the Diploma.

The Aryan Section met at the Royal Institution at 2·30 P.M., when Professor Max Müller delivered his Opening Address.

At the conclusion of the President's Address, Professor Stenzler, of Breslau, read a paper on the Hindu Doctrine of Expiation.

Professor Haug then read a paper on the Interpretation of the Veda.

Mr. Shankar Pandurang Pandit next addressed the meeting on Hindu Law and its Bearing on Violation of Caste.

Professor Thibaut followed with a paper on the Çulvasûtras, a class of writings which contain the very first beginnings of Geometry among the Ancient Indians. There are known up to the present two Çulvasûtras, ascribed to Baudhâyana and to Âpastamba, and forming, as it appears, portions of the Kalpasûtras of these authors; besides a Çulva-pariçishta, belonging to the White Yajurveda, and claiming Kâtyâyana for author. Professor Thibaut concluded by pointing out that some technical terms of later Indian mathematics find an unexpected explanation from their use in the Çulvasûtras.

The Hamitic Section assembled in the rooms of the Society of Biblical Archæology, 9, Conduit Street, Regent Street. Dr. S. Birch, the President of the Congress, was President of this Section, which he opened by a short Address.

Professor Lepsius then proposed the three following questions to the Hamitic Section:

1. The same method of transliteration of Old Egyptian sounds into Roman has been pretty generally adopted by Egyptologists, but another view also obtains regarding a few signs. It would therefore be desirable if the Egyptologists here assembled would come to a decision that should be binding on them for the future.

2. The possession of a complete list of all hieroglyphic signs

properly classified and arranged, with the indication as far as possible of the figurative meaning of each sign, is a great desideratum. A competent person ought to be found to prepare such a list, which would then have to be submitted to scholars for the purpose of completion or rectification.

3. One of the most important steps towards the furtherance of hieroglyphic studies would be a complete critical edition, with the various readings of the "Book of the Dead," in its three versions, viz. "Old Empire," "Theban Dynasties of the New Empire," "Psametichus." This task surpasses the competency of a single person. But a joint recognition of the importance of such an undertaking on the part of the Egyptologists here assembled would perhaps serve as an incitement to obtain for this purpose the pecuniary means and the authoritative support of a scientific academy or a government.

The discussion of the details of these three propositions was reserved for a special sitting of the Egyptologists (see *infrâ*, page 439).

He was followed by His Excellency Professor Brugsch (Bey), the Delegate from Egypt to the Congress, who read a paper on the Lake or Sea passed by the Israelites on their Exodus from Egypt.

The Baron Textor de Ravisi then drew the attention of Oriental scholars to the important publications of the Academical Societies of Algiers. They are mostly written by specialists, and contain new, useful, and interesting matter on Oriental study, translations from the Arabic, studies on the habits of the people, and historical and archæological documents. M. de Ravisi presented to the Congress, in the name of the great French colony, the "Annales de la Société Archéologique de Constantine," the "Revue Africaine," and different other interesting works; and also two MSS. by M. Feraud, the Chief Interpreter of Algiers. The meeting, on the proposition of the President, Dr. Birch, voted thanks for these valuable gifts.

After a few introductory words by the President, Dr. Birch, the following notice was given by Professor Ebers of a great medical papyrus he bought some years ago at Thebes, and which he is now about to publish:

The Papyrus-Rolls of the Ancient Egyptians, which we know of, may not only be looked upon as the best and most trustworthy data for the study of the realities of Egyptian Antiquity, but we owe it to

them if we succeed in adding to the Accidence of Egyptian Grammar a chapter on the Syntax. It is well known how important the Papyri have also become for the Literatures of the Occidental Nations. Our "Paper," our "Bible," even words like "Rubric" (from the beginning of the sentence written in red, or *Rubrum*), and "Protocol" (the foremost leaf glued to the Papyrus-Roll), all owe their origin to the writings on Papyrus. Papyrus-Rolls are preserved in all Museums and Libraries of any pretensions at all. The largest manuscript of this kind which has been discovered up to the present time is the large Harris Papyrus in the British Museum; the next largest is the Medical Papyrus which was brought to Europe by Ebers in 1863. Rolls treating on the Medical Science of the Egyptians are to be met with at Berlin, London, Leyden, and Boulâq; but they are not at all to be compared with the Ebers Papyrus, neither in respect to their contents, nor their preservation and size; for while the largest of them, the Berlin Medical Papyrus, contains twenty more or less damaged pages, the Leipsic "Ebers Papyrus" consists of 110 pages, on which not a single character is wanting. It is just this marvellous preservation of the Papyrus which distinguishes it so much from all the other manuscripts. Besides, in this Papyrus we possess the *complete book* from the time of the Pharaohs. Both the beginning and the end have been preserved. Here and there large empty pieces furnish us with proofs that there could not have been any other writing, either before or after the roll preserved to us. We could not possibly have any better sources of information respecting the *age* of the Ebers Papyrus, than a calendar notice upon the back of it, from which we learn that in the ninth year of a king of the fourth dynasty (presumably King Bicheris), the New Year's Festival, the 1st of Thoth of the fixed year, and the day of the early rising of Sirius or the Sothis Star, fell upon the same day as the 9th of Epischi of the floating year. The astronomical control of the calculations proves that this event took place in the time of the Pharaohs, firstly about 3010–3007, then about the middle of the sixteenth century B.C. The letter-forming signs and the grammatical forms show the Papyrus to belong to this latter period. The ancient scribe mentions also on the back of his work a calendar event, which happened again for the first time since the reign of the fourth dynasty and King Bicheris (1559 B.C.). Dümichen has adduced

striking proofs of the correctness of our deductions, and has shown how, aided by the calendar on the back of our Ebers Papyrus, the first astronomically-established numbers are to be gained for the chronology of the old and the beginning of the new Monarchies. These figures or numbers come very close to those arrived at by Professor Lepsius in a totally different way.

The contents of the Papyrus furnish a favourable testimony to the knowledge and industry of the Ancient Egyptian medical men. The great text consists of a series of very ancient writings, which can partly be separated as regards their styles, and which are also explicitly called citations. The most important amongst them is probably the book on Diseases of the Eye, and the Tractate on the Heart, which commences thus: "Here begins the mystical tractate of a physician, who knows the functions of the heart, and from which proceed vessels to all parts of the body; in respect of the same the physician Neb sext, a priest and magician, affirms," etc., etc. Nearly all diseases are treated of, and some described. Amongst the means are Invocations, but these are only meant to increase the working of the medicines, which are taken from all the kingdoms of nature, and not only from Egypt, but also from foreign countries, both near and far. The quantity of doses to be applied is expressed in numbers. It hardly admits of a doubt that we possess, in our Papyrus of the Hermetical Books, the one on Medicine which Clement of Alexandria calls "The Book of Medicines." This supposition of ours is supported by Ludwig Stern's discovery of the Arabic Manuscript of Abu Sahl Isa ibn Jahja el Mesihi, in which passages are translated from our Papyrus, which is called "The Book of Hermes," and which promises to be of great importance for the right understanding of the Papyrus. This manuscript is of incomparable value for the History of the Medical Sciences, and none the less for the History of Human Culture of the earliest periods; for as it shows that not only medicaments, but also writings were borrowed from Asia during the 16th century B.C. (viz. Ophthalmic Medicines were given according to an Amu, *i.e.* an Asiatic from Byblos in Phœnicia), the conclusion becomes self-evident, that even in those early days the Egyptians stood, not only in political and mercantile, but much more so, and that is particularly surprising, in intellectual relations to their Eastern neighbours. The Ebers Papyrus contains much interesting

matter for students of the Old-Egyptian Grammar, and by it the Dictionary of Hieroglyphics will be enriched by hundreds of new groups.

In conclusion, Prof. Ebers exhibited a perfect copy of his facsimile of this venerable manuscript, which that learned friend of science, John, King of Saxony, presented to the Leipsic University Library. This roll, cut up into thirty-five pieces, of from two to three feet in length, is now preserved in a glass case. The work, which has been superintended by Professor Ebers himself, will shortly be published by Mr. Wilhelm Engelmann, of Leipsic. One hundred and ten plates of this splendid work have been, by means of a perfectly novel process, so artistically executed by Messrs. Giesecke and Devrient, the eminent printers and lithographers of Leipsic, famous for their printing of the "Codex Sinaiticus," that it really is a difficult matter to be able to distinguish the Facsimile of the Papyrus from the Original. Professor Ebers promises to place the work, with a translation by himself, and a complete glossary by his friend Stern, before his fellow-labourers in a very few months.

Professor Eisenlohr, of Heidelberg, then read a paper on Egyptian Measures from the Mathematical Papyrus of the British Museum.

A paper was presented by W. R. A. Boyle, Esq., on the Proportions of the Great Pyramid at Gizeh (or Djizeh).

Professor J. Lieblein, Adjoint à l'Université de Christiania en Egyptologie, then read two short communications.

A paper, Communications to the Section on his work in Bädeker's Handbook of Egypt, was then read by Professor Dümichen.

Friday, September 18.

The Aryan Section re-assembled at ten o'clock to finish their sitting, which was not completed on Thursday, when the Rev. Dr. Mitchell read a paper on the Difficulty of Rendering European Ideas in Eastern Languages, and the President proposed that a Committee of the Congress should consider the subject for the benefit of Missionaries.

The next paper was by Mr. Shankar Pandurang Pandit, on the Age of the great Sanskrit Poet Kâlidâsa.

The President then communicated a paper by Dr. Wise on the

Ancient Systems of Hindu Medicine, and one by Colonel Ellis, on Disputed Points of Indian History.

Le Baron Textor de Ravisi expose qu'entre les nombreux travaux qu'il a reçus de l'Inde de la part des missionnaires Catholiques, il n'entretiendra le Congrès que de deux d'entr'eux pour ne pas abuser de son attention. Il les a choisis à cause de l'importance hors ligne des questions qu'ils abordent : *l'inscription de la pagode d' Oodeypore (dans le Malva) et la Chronologie hindoue au point de vue de Christianisme.*

Inscription d' Oodeypore.—M. de Ravisi a déjà fait, lui-même, un mémoire sur la traduction latine de l'inscription d'Oodeypore par le savant *R. P. Burthey,* missionnaire de Maduré. La question est très-grave : une première traduction anglaise de cette inscription avait été publiée, en effet, par la Société Asiatique de Calcutta (1840) faite par Pandit Kamala-Kauta ; or ces deux traductions d'un text hindou *réputé le même,* sont complètement différentes.

L'inscription a été copié par Prinsep et transcrite du Pâli en Dévanâgarî par le capitaine Burt. M. de Ravisi demande au Congrès de Londres, comme il l'a fait a celui de Paris (1873), que *la Société de Calcutta soit invitée à envoyer une photographie de cette inscription murale.*

La Traduction du brahme présente, en effet, une légende sans importance aucune, tandis que la traduction du missionnaire découvre *le plus grand monument archéologique hindou que nous ayons, concernant le Christianisme dans l'Inde.*

Chronologie hindoue.—M. de Ravisi analyse, en suite, la chronologie hindoue d'après un manuscrit intitulé : *Essai sur la chronologie hindoue ou les anciens et les nouveaux Bouddhas.* L'auteur en lui faisant cet envoi a exprimé le desir de garder l'anonyme.

L'argumentation est fondée sur les dates relevées par l'inscription d'Oodeypore et sur les deux seules indications qui existent dans les Annales de l'Occident, concernant les temps antiques de l'Inde (conservées par Pline le Naturaliste). L'auteur démontre, à la suite d'une savante dissertation sur les textes hindous, que les ères de Vicramaditya et de Salivayana sont chrétiennes et que l'astrologie ou astronomie hindoue ne peut soutenir la discussion historique et philosophique.

M. Max Müller félicite M. de Ravisi, et lui promet le concours personnel qu'il lui a demandé pour ses Etudes Hindoues.

During the meeting of the Aryan Section, a number of Sanskrit and Prâkrit MSS., chiefly selected by Professor Eggeling from the collection of the Royal Asiatic Society, were exhibited. They were interesting, partly as being remarkable specimens of calligraphy, and partly on account of the character and material used. The most important among them were a number of ancient Jaina palm-leaf MSS. Four of them, dating from the 12th to the 14th centuries, had been sent home for the inspection of the Members of the Congress by Professor G. Bühler, of Bombay, by whom they had been found, with many others of the same kind, on his recent official tour through Râjputâna.

Mr. Vaux then proposed a vote of thanks to Prof. Max Müller, the President of the Section, which was seconded by Sir Mutu Coomára Swámy, who, at the same time, in the name of his countrymen, expressed his gratitude for the interest which European scholars take in their ancient literature. The President then declared the meeting of the Aryan Section closed.

The Archæological Section of the Congress met on the morning of Friday the 18th, at eleven o'clock, at the Royal Institution, when the President, M. E. Grant Duff, Esq., M.P., delivered an Inaugural Address.

At the conclusion of the President's Address, Professor Eggeling read a paper on the Inscriptions of Southern India.

The Inscriptions were most of them on copper-plates, and were exhibited at the Meeting.

In the discussion that followed, Sir Walter Elliot, Mr. L. Bowring, Dr. Caldwell, and Mr. J. Burgess severally bore witness to the large number of inscriptions, some of them of very great importance, scattered broadcast over the parts in which they had resided, and expressed their opinion as to the utter insufficiency of individual action in this respect, and the desirability of some steps being taken to rescue those documents from oblivion.

Professor R. G. Bhandarkar, M.A., of Bombay, then read a paper on the Nâsik Cave Inscriptions.

Dr. Hyde Clarke, Corresponding Member of the American Oriental Society, presented a Note on some Ancient River Names of India and India extra Gangen, in their Relations with similar Names in America.

Professor Leitner then drew attention to "Græco-Buddhistic" sculpture as follows:

It will, probably, be found that Muhammadan Architecture in India has *not* been overrated, but my object in rising is to inform you that a fact has now been established, of which during many years there had been more than a suspicion in India, as well as the conjecture of Mr. Fergusson and others in England. I mean that the collection, which I shall have the honour of showing you to-morrow, leaves no room for doubt that the invasion of Alexander the Great and the existence of the Bactrian Kingdom left visible traces of the influence of Greek Art on Buddhist sculpture. This is proved by inscriptions, by historians, and by the total dissimilarity of the Græco-Buddhistic sculptures excavated on and beyond the Panjab Frontier with anything found elsewhere in India. Only where Alexander is known to have penetrated, these marvellous relics are found. No petty line of Rajahs, ensconced in some remote sub-alpine nook in the Himalayas, is known to have existed and to have developed a pure School of Art; but the question to an artist was settled when critics called those very specimens "degenerate Buddhistic," which, for purposes of comparison, I had actually procured from Cyprus and the foot of the Mysian Olympus, and had placed, without as yet labelling them, alongside the sculptures dug up in India. The commanders under Nearchus and subsequent rulers of Bactria and Aria were Cypriotes, and so a point had to be established by specimens from Cyprus. You will, however, find in the collection—so as to settle the matter beyond all doubt—Greek, Roman, Egyptian, Barbaric, Hindu, and other sculptures, all placed there for the purpose of showing that we are dealing with a great new fact and no mere theory. The Hindu, to whom this world was nothing, sought to express omniscience by innumerable eyes, and omnipotence by many arms, but he never rose, as did the Buddhist, when taught by the Greeks, to the conception of the beauty and due proportion of the human form. People who have not been to India or who have not studied Art may deny the "Græco-Buddhism" of the sculptures; but the sculptures underwent a searching examination by leading scholars at Vienna and elsewhere; and since 1870 the term has been accepted, and introduces us to the exact interpretation of the historical and religious scenes which you will see to-morrow carved in stone.

From three to six P.M. J. W. Bosanquet, Esq., Treasurer of the Society of Biblical Archæology, gave a garden party to the members of the Congress, at his residence, Claymore, Enfield.

SATURDAY, SEPTEMBER 19.

On this, the last day of the International Congress of Orientalists, the members visited the South Kensington Museum at ten A.M. The Director of the Museum, Mr. Cunliffe Owen, did the honours of the institution, and exhibited to the assembled Orientalists the treasures of the library, consisting of several scarce and valuable Oriental manuscripts.

At the Albert Hall adjoining, Dr. Leitner explained his collection of curiosities and antiquities from Central Asia, etc.

Colonel G. G. Pearse, R.A., then moved a vote of thanks to Professor Leitner for his able and instructive lecture, and above all for his public spirit in devoting himself during so many years to the acquisition and dissemination of important facts connected with the archæology, philology, ethnology, and education of the East, and his devotion to the cause of science, as evidenced by bringing his splendid collection to Europe. The vote was carried by acclamation.

On Saturday, the 19th, the Ethnological Section met at the Royal Institution at 2·30, when the President, Professor Owen, C.B., delivered an Opening Address.

Immediately after the conclusion of his speech, Professor Owen was obliged to leave, and his place was filled by M. E. Grant Duff, Esq., M.P., who called upon Dr. Forbes Watson, Reporter on the Products of India, and Keeper of the India Museum, for a paper on the Foundation of an Indian Institute for Lecture, Inquiry and Teaching.

Dr. Forbes Watson then read an abstract of his paper.

A paper was then read by Dr. Bachmaier, Secretary of the Anthropological Society of Munich, and Director of the Munich Gallery, 48, Great Marlborough Street, on "Pasigraphy," a system of Universal Writing by means of numbers. The method is as follows:—The most indispensable words of a given language, say about four thousand,

are numbered, and the same figures are used to denote the respectively equivalent words in another language, thus enabling an Englishman and a German, for example, though each may be ignorant of the other's tongue, to exchange ideas in writing. Thus the notion *book* is expressed by the common symbol 553 in every one of the dozen or so of Pasigraphical Dictionaries already published, or in course of preparation. Herr Bachmaier disclaims the merit of having originated this genial and fruitful idea, which may be clearly traced back to the former half of the seventeenth century, and whose germ seems to be found even in the writings of Cicero. Nay, the very method was anticipated by the ingenious Cave Beck of Ipswich, in his now very scarce work, published April 30th, 1657, entitled "The Universal Character by which all the Nations in the World may understand one anothers Conceptions, reading out of one Common Writing their own Mother Tongue." On the other hand, Herr Bachmaier may fairly claim the credit, not only of having greatly simplified the system, but also of having recalled public attention to the value of "Pasigraphy" as an important lever of human progress. Dr. Bachmaier presented 300 copies of his Pasigraphical Dictionaries in English, French, and German, to the members of the Congress.

Mr. Frederick Drew, late Trade Commissioner in Cashmere, next read a paper on the Castes and Certain Customs of the Dârds.

Dr. Leitner said, at the conclusion of Mr. Drew's paper:—

It may not be considered to be out of place for the discoverer of the races and languages of Dardistan to offer a few remarks when a paper is read on Dard castes. Mr. Drew deserves great credit for having added a few new facts, which are substantially correct, and which he could not have elicited had he not studied my publications. Had Mr. Hayward done so, he would, probably, not have been murdered, for I could have informed him of the precise relations of his murderer, Mir Vali of Yasin, with the Maharaja of Kashmir, and he might have added to my Vocabularies, instead of trying to go over the same ground. It is absolutely necessary for me to mention this, as some Society may again wish to undo history and send out a man to gain the credit of making inquiries at first hand, but really send him to his destruction by not supplying him with the Dialogues, History, etc., etc., which I was the first to commit to writing from the mouths

of the Dards, and which are the key to their confidence. Nothing could be more desirable than that those who follow me should point out my errors, as long as they will *add* to our knowledge, which they can only do by availing themselves of the labours of their predecessors. As I have only published the actual *results* of my inquiries, and never mentioned anything about my own adventures and views, there is nothing in the already issued parts of Dardistan which can be consigned to the waste-paper basket. That the Dard languages are, at least, contemporaneous with Sanskrit has been confirmed by my subsequent investigations in the languages—altogether eleven—between Kabul and Kashmir; but what we want is not imaginative philology, but actual researches among the nations abroad. *There is too much library knowledge and too little living knowledge of languages and races.* When any great philologist is unable to ask for food in any of the languages on which he is an authority, one is almost tempted to question his claim to leadership. The severity of these remarks is justified by the cliquism or routine condition to which some Asiatic Societies are tending, and out of which Congresses such as these are meant to rouse them.

This brings me to another subject which it was understood I was to bring before you to-day had there been time—namely, the account of the Oriental movement in Northern India, its great past and prospective success, and its bearing on the researches of most of the Sections of this Congress. Many here know the value of that movement on the studies of Orientalists in Europe, and are prepared to support it. Much of what has been noticed in the Address of the President of the Aryan Section has been due, either directly or indirectly, to the unceasing efforts of the promoters—native and European—of the Panjab University movement since 1865, efforts which have now received the sanction of an enlightened Government, and without a full knowledge and appreciation of which the best summary of Oriental progress must necessarily be incomplete.

The next paper was one by Basil H. Cooper, Esq., B.A., on the Date of Menes (B.C. 4736), Egypt's Protomonarch according to Diodorus, Manetho, the Turin Pharaonic Papyrus, and Hieroglyphical Monuments bearing Dates of the Thirty-Year Cycle, mentioned on the Rosetta Stone.

Then followed a paper on the Andamans and Andamanese, by Dr. Dobson.

The Rev. J. Long, from Calcutta, then presented to the Congress a paper on Oriental Proverbs, and their Use.

M. Duchateau, Secretary to the French Delegation, not having received a paper by M. Madier de Montjau, *Etudes ethnographiques et commerciales sur l'extrême Orient*, which was to have been read in this Session, asked the President to take note of the fact of its non-arrival, so that it might be embodied in the "Memoirs of the Congress."

Professor Oppert here addressed the meeting in English as follows:

In the name of the foreign members present, I beg to express my thanks to the English members of this Congress for the great and cordial hospitality with which they have received us. The savants here assembled from all parts of the world will carry with them a pleasant impression of their reception, a better one than they could have expected, as the fear was, that in the presence of so many great interests, the Congress would pass off unnoticed, but this fear was unfounded. The English public has not only received with a marked interest the communications made to the different Sections, but also the newspapers have filled their columns with the records of the proceedings of the Orientalists—some of them even giving the speeches as delivered *in extenso*. It is difficult to create, but still more difficult to preserve; if to the Paris Congress belonged the merit of inaugurating these great meetings of Oriental scholars, to that of London belongs the honour of having consolidated the undertaking and of assuring its continued existence.

Professor Oppert at this point thanked Professor de Rosny for his efforts.

The President then thanked Professor Oppert, and declared the sitting of the Section closed.

The last duties of the Congress being to decide where the Third or next year's International Congress of Orientalists should be held, and to select a President for the same, they proceeded to that business, and, on the recommendation of the Council, St. Petersburg was fixed on. Count Woronzoff Dashkow was nominated President, with an acting committee, consisting of W. W. Grigorieff, Professor of

Oriental History and Dean of the Faculty of Oriental Languages in the University of St. Petersburg; K. P. Patkanoff (an eminent Armenian scholar), and D. A. Chwolson (a distinguished Hebrew and Arabic linguist), both Professors of the same Faculty, and H. A. Kuhn, who is charged with the exploration of antiquities in Central Asia. Thus closed the London meeting of the International Congress of Orientalists.

During the course of this sitting, the members were invited to visit the Christy Museum of Pre-Historic Antiquities, Victoria Street, which they did at 3.30 P.M.

EGYPTOLOGY.

In accordance with the Propositions of Professor Lepsius, made to the Hamitic Section of the Congress of Orientalists, a Special Conference of Egyptologists was held at the residence of Dr. Birch, by his invitation, on Saturday, September 19, 1874. The eight following Egyptologists were present: Dr. Birch, Professor Lepsius, Professor Ebers, Professor Brugsch (Bey), Dr. Ludwig Stern, Professor Lieblein, Professor Eisenlohr, and Mr. Le Page Renouf. The following "Protocol" was resolved upon:

PROTOCOL OF THE SEPARATE MEETING OF EGYPTOLOGISTS OF THE HAMITIC SECTION.—*Saturday, Sept.* 19, 1874.

The three propositions which were brought before the Hamitic Section by Professor Lepsius concerned exclusively Egyptian Philology. They were, therefore, according to a resolution of the Section, discussed in a special sitting of the Egyptologists at the house of the President of the Congress and of the Hamitic Section, Dr. Birch, September 19, at 9 A.M. There were present: Professor Lepsius, from Berlin, in the chair; Dr. Birch; Mr. Le Page Renouf; Professor Brugsch, from Göttingen; Professor Ebers, from Leipsic; Professor Eisenlohr, from Heidelberg; Professor Lieblein, from Christiania; and Dr. L. Stern, from the Egyptian Museum at Berlin.

I. The first business concerned the transcription of the Old Egyptian sounds. As in the case of all transcriptions of foreign tongues, the main problem was rather to fix for every sound a conventional and universally current mode of writing, than to discuss afresh the principles of transcription in general, or even to take up a narrower ground, and to determine the exact pronunciation of each sound. E.g. it was acknowledged that the transcription *a*, with dot above,

and of *ā* for the hieroglyphs "Reed" and "Arm" respectively, does not answer to the original purport of these two signs, since, like their linguistic analogues, the Hebrew letters "Aleph" and "Ain," they have a consonantal value. But since the transcription of the two hieroglyphs as above has been universally introduced, no change ought to be made in this respect. In like manner it was admitted to be an inconvenience that the weak-sounding hieroglyph, called the Mæander, denoted by the unpointed *ḥ*, is far more rarely used in the Old Egyptian texts than the knotted cord, the symbol for which is the *ḥ* with a dot beneath, and that, accordingly, it seems more to the purpose to put the diacritical point under the strong, instead of under the weak, *ḥ*. But here, also, no change was made in the usage already introduced, and this so much the more, inasmuch as in the linguistic alphabet, also, the simple aspirate *ḥ* is always written without any diacritical point or mark of distinction. In like manner for the hieroglyphs of the Two Parallel Diagonals=*i* and the Doubled Reed=*ī*, or the former *i* lengthened; for the Bowl=*k*, the Throne=*k*, with dot below, the Angle=*q*; for the Semicircle=*t*, the Hand=*t*, with dot or point below, and the Snake=*ṯ*, with acute accent to the right, the received marks of distinction were retained. For the hieroglyphs Inundated Garden and Pool also, although they are not interchangeable with one another in the Old Egyptian roots, it was taken as a settled point that the pronunciation of both was one and the same, or, at any rate, that they should both have the same notation. Accordingly the transcription for both remains *s*, surmounted by the inverted circumflex accent.

On the other hand, for the sugartongs-shaped Lasso or Noose the new sign *θ*, identical with the Greek Theta, was accepted, after Professor Brugsch Bey had communicated a series of Old Egyptian words, in which, judging from comparison with other languages, this hieroglyph must have been pronounced li*th*pingly, or with an assibilation. The linguistic value of the sound *θ* is the assibilated T sound of the English *th*. Hence this form of the Greek Theta, used, like the other transcriptions, in the Lepsian Missionary Alphabet, seemed the proper transcription of the Lasso hieroglyph, and as against differing propositions this obtained the majority. It was acknowledged that the Lasso does not interchange with the other T's in the Old Egyptian roots. But since, on the other hand, this interchange is very fre-

quent in the grammatical terminations, it was resolved to stick to the new transcriptions in transliterating the roots only. Thus is obtained the following alphabet of 25 sounds (Lauten), so far agreeing with the tradition preserved by Plutarch, that the Egyptians possessed an alphabet of 25 letters, on which tradition Brugsch Bey has always laid great stress: (1) Eagle=*a*; (2) Reed=*a*, with dot above; (3) Arm=*ā*; (4) Pair of Parallel Diagonals=*i*; (5) Doubled Reed=*ī*; (6) Chick=*u*; (7) Bowl=*k*; (8) Throne=*k*, with dot below; (9) Angle=*q*; (10) Sieve=χ, or Greek Chi; (11) Mæander=*h*; (12) Knotted Cord=*h*, with dot below; (13) Semicircle=*t*; (14) Hand =*t*, with dot below; (15) Snake=*t*, with acute accent to right; (16) Lasso=θ, or Greek Theta; (17) Chairback, or Crotchet, and substantially identical with our own Crotchet S=*s*; (18) Inundated Garden=*s*, with inverted circumflex accent over it, sounding like our *sh*; (19) Square, or, as Dr. Birch, the Window-blind=*p*; (20) Leg= *b*; (21) Cerastes Serpent=*f*; (22) Mouth=*r*; (23) Lion Couchant=*l*; (24) Owl=*m*; (25) Zigzag, or Water Line=*n*.

II. Next to the important question of the transliteration of the Old Egyptian characters into their equivalents in the Missionary Alphabet, the perfect cataloguing of the hieroglyphs seemed the most pressing interest of Egyptological science. It was agreed that it is eminently desirable to possess a recognized complete list of the hieroglyphical signs, arranged according to classes. Not only should these classes themselves be fixed and determinate, but the individual signs should be assigned to their respective classes, not arbitrarily, but according to definite rule. For the purpose of such arrangement the objects represented by the hieroglyphs rather than the sounds indicated must be mainly kept in view. In a word, the method introduced by Champollion himself, and adopted, after him, in the various more or less exhaustive enumerations of the late Vicomte de Rougé, and Drs. Brugsch Bey and Birch, must be steadily followed. Professor Eisenlohr proposed that the hieratic forms of the hieroglyphs also should be added to the list, so far as they are known. This addition to the resolution was carried. It seemed the best plan that one of the *savants* should prepare and draught the list, and that this should then be circulated among the members of the body for confirmation, correction, completion, and enlargement. It is confidently expected that the directors of museums in particular will note whatever new and ad-

missible signs may be found in their respective collections. Among the *savants* present Dr. Ludwig Stern alone was found both able and willing to undertake the preliminary labour of draughting such a list, and his offer to do so was accepted by the assembly with thanks.

III. From this subject the Egyptologists passed to consider another of great interest and importance. It seemed of special moment for the furtherance of Egyptian studies that an edition of the Bible of the Old Egyptians, the Ritual, as Champollion called it, or the Book of the Dead, as Lepsius styles it, as critical and complete as possible, should be steadily kept in view. Such edition should present a threefold recension of that most venerable monument of Egyptian speech, archæology and religion, *i.e.* it should give us the Book of the Dead as its text existed—1. Under the Old Empire; 2. Under the Theban Dynasties of the New Empire; 3. Under the Psammetici (Dynasty XXVII.). The first steps towards the realization of this grand project must be the selection of a thoroughly qualified Egyptologist, to make a circuit of the different museums and other collections of Egyptian papyri and other monumental remains, in order that he may make himself acquainted with the different materials to be taken account of for such a purpose. For it would not suffice merely to request the directors of museums or private possessors to communicate information respecting such materials; communications of this kind would neither be complete, nor would they be based upon the same views as to what sort of information is desirable.

In order, however, to render possible the carrying out of such an undertaking, which far transcends the powers of an individual, from a pecuniary point of view, as well as for the purpose of securing for the plan the guarantee of the higher authority, it will be necessary to enlist the support of some National Academy or some Government, or of both. Professor Lepsius expressed his readiness to back such a proposal at Berlin with all his influence.

The next question concerned the person who might be qualified and willing to undertake such a journey of literary and antiquarian research. A special committee must be appointed to determine in detail the principles on which such an edition should be based, and this committee would also express its opinion as to the sort of materials to be amassed from the different museums, and as to the requisite amount. The editing itself of the several portions of the Book of the Dead, on

the termination of the preliminary labours and researches, would be shared among different Egyptologists willing and competent to participate in such a work. This division of labour would be settled by agreement of the committee with the several *collaborateurs*.

The nomination of this committee will not be timely until the means for carrying out the undertaking shall have been secured. For the work of collecting all the materials M. Edouard Naville, of Geneva, was proposed, and his acceptance of the commission was unanimously deemed desirable. Since, unhappily, he was detained through temporary ill-health from appearing at the Congress, it was understood that a proposal to this effect would be made to him on the part of the President of the Congress and of the Hamitic Section, Dr. Birch.

THE MANSION HOUSE BANQUET.

According to the invitation of the Right Hon. the Lord Mayor, Sir Andrew Lusk, Bart., M.P., the members of the International Congress of Orientalists met on Saturday evening, September 19, at the Mansion House, to partake of his hospitality. The "Loving Cup" having gone round, the Lord Mayor, in a characteristic speech, proposed the health of the Queen and the Royal Family, and "Success to the International Congress of Orientalists." He said that "one touch of nature made the whole world kin," and it had occurred to him that Oriental and Occidental people were all able to dine, and that he could not do better than take them on that common ground, and request the honour of their presence that evening. He then called upon Professor de Rosny.

Professor Léon de Rosny having responded,

The Lord Mayor then proposed "The present Members of the Oriental Congress," coupling with the toast the names of Dr. Birch, Professor Lepsius, and Mr. Shankar Pandurang Pandit; each of whom returned thanks in appropriate speeches.

Sir Bartle Frere next rose, and said he felt himself fortunate in having entrusted to him a toast which did not require many words to recommend it to unanimous approval, viz. "The Health of the Lord Mayor."

The Lord Mayor, in returning thanks, said, though he could not respond in Sanskrit, Egyptian, or Bengali, yet he felt truly grateful for the compliment paid him. He went on to say that he had a toast to interpolate—"The health of His Holiness the Patriarch of Syria," the head of a Church founded by St. Peter, and also of, perhaps, the most primitive and simple Christian Church which had come down to the present time.

The Patriarch responded in his native language, and his speech was interpreted by Mr. E. T. Rogers, late H.B.M. Consul at Cairo.

The Lord Mayor next proposed "The Presidents of the Sections," Sir H. Rawlinson, M. E. Grant Duff, Esq., M.P., and Professor Max Müller.

Sir H. Rawlinson, in responding on behalf of the Semitic Section, said: Oriental scholars, like all other scholars, belonged to the *genus irritabile*, and he believed there were none in that assembly who had passed their literary life without having given and received hard blows. Now personal intercourse softened the asperity of literary controversy, and those who had been opposed on literary subjects would find on meeting, that, although they might differ on certain matters, they were still gentlemen and scholars, and in their future controversies they would adopt to each other a more kindly tone from having met together at the social board.

Mr. M. E. Grant Duff, M.P., then returned thanks in a brief speech, to leave time, as he said, for the President of the Aryan Section, who had been so pointedly challenged by the Lord Mayor.

Professor Max Müller then rose, and in a speech, alluding to Eastern, and comparing it with Western, hospitality, and bringing in the Eastern myth said to be the origin of "Dick Whittington and his Cat," told the Lord Mayor he might rest assured that after the truly Eastern banquet of to-night—a banquet which, in the grateful remembrance of all here present, will rank as the thousand and second Arabian Nights entertainment—he will for ever be known among Oriental scholars as the hospitable, magnificent, and truly Oriental Lord Mayor of London.

The health of the Lady Mayoress having been proposed by Prince Charles of Roumania, and acknowledged by the Lord Mayor, the company retired.

VISIT TO THE

BRITISH AND FOREIGN BIBLE SOCIETY.

On Monday, September 21, a large gathering of members of the Congress was held in the Library of the British and Foreign Bible Society, Queen Victoria Street, E.C. The Rev. R. B. Girdlestone, who is the head of the Translation and Editorial Department, took the Members round the room, and showed specimens of some of the earliest printed translations of the Bible in various languages. The attention of the *savants* was also directed to the Oriental MSS., specially the Ethiopic Biblical MSS., in which the library is very rich. Specimens of the Society's versions in about 200 languages and dialects were exhibited, and many of them proved very attractive, such as the Revised Tamil Bible, the various Chinese versions, Bibles in the South Sea Languages, the African and North American Indian versions. It may be mentioned that last year the Congress at Paris awarded a bronze medal and diploma to the British and Foreign Bible Society in consequence of the excellence of the versions exhibited on the occasion.

LIST OF MEMBERS:

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INTERNATIONAL CONGRESS OF ORIENTALISTS,

LONDON, 1874.

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Conway, Moncure D.
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Cooper, W. R.
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Crawford, Dr. A.
Crawford, W. N.
Cull, R., F.S.A.
Cunningham, Col.
Cust, R. N.

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Dowson, Prof. J.
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